



Summary of Agromet Advisory Services for different States of the country

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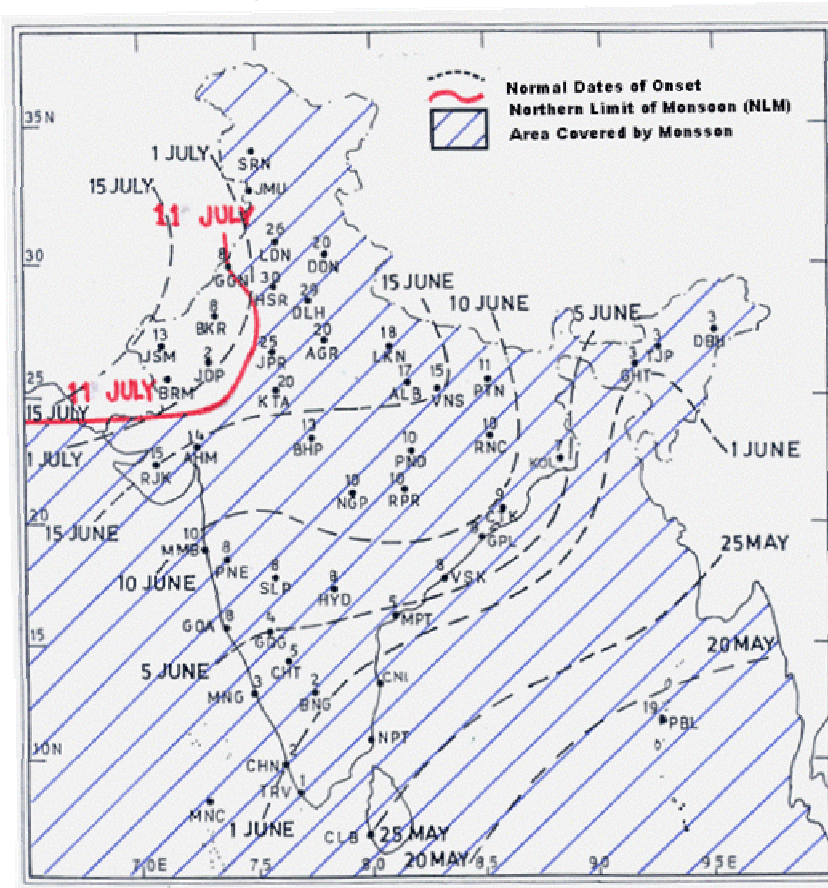
Agricultural Meteorology Division, India Meteorological
Department, Pune, India

Thursday, 13th July, 2006

(For the period 13th to 17th July, 2006)

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

Progress of Southwest Monsoon



Southwest monsoon has further advanced into most parts of **East Rajasthan** and some more parts of **West Rajasthan**.

The **Northern Limit of Monsoon** as on **11th July** passes through **24°N/64°E, 24°N/68°E, Udaipur, Ajmer, Churu and Ganganagar**.

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

Punjab & Haryana

Monsoon was vigorous on 10th July in **Haryana** and remained active on 10th and 12th July in **Punjab** and on 11th July in **Haryana**.

Rainfall occurred at most places on 10th July; at a few places on 11th and 12th July in **Punjab**.

Rain / thundershowers are likely at many places over the States. Rainfall activity likely to decrease after 48 hours.

Isolated heavy rainfall also likely over **Punjab**.

Advisories

- In view of recent rainfall and expected rain / thundershowers at many places over the States transplanting of **paddy** is recommended
- Sowing of **direct seeded basmati rice** may also be considered based on of recent rainfall and expected rain / thundershowers.
- This is proper time for sowing **groundnut** and **kharif pulses**. Continue sowing of healthy seeds of these crops.
- Incidences of **Jassid**, **Bollworm** and **other leaf eating caterpillar** are reported. As prevailing weather conditions are favourable for further spread of these pests, check it by adopting adequate plant protection measures after the current spell of rain.

Rajasthan

Monsoon advanced further in most parts of East Rajasthan and some parts of North West Rajasthan.

Light to moderate rainfall recorded at many places in Jaipur, Kota and Udaipur divisions, at a few places in Ajmer & Bikaner divisions. Weather remained mainly dry in Jodhpur division. Heavy to very heavy rainfall also recorded at a few places in Jaipur, Ajmer and Bikaner divisions during this period.

Rain / thundershowers are likely at a few places over East Rajasthan and isolated places over west Rajasthan.

Advisories

- Continue sowing of **kharif** crops like **groundnut**, **bajra**, **maize**, **soyabean** and **pulse crops** in East Rajasthan.
- There was no significant rainfall except in **Alwar**, **Dausa**, **Jaipur**, **Jhunjhunu**, **Sikar**, and **Udaipur** in **East Rajasthan** and rain or thundershowers are likely to occur at a few places over **East Rajasthan** for the next three days. Under the circumstances apply irrigation to **kharif cotton** depending on the rainfall situation in **East Rajasthan**. Apply irrigation in the above mentioned districts depending on soil stored moisture and rainfall situation.
- There was no significant rainfall except in **Hanumangarh** and **Nagaur** in **West Rajasthan** and rain / thundershowers are likely only at isolated places, apply irrigation to **kharif cotton** to bring the soil moisture to field capacity. Apply irrigation in the above mentioned districts depending on the soil profile stored moisture.

Uttar Pradesh

Southwest Monsoon has further advanced in the remaining parts of U. P. Monsoon was active in West U. P. Rain occurred at most places with very heavy fall at isolated places in **Bareilly**, **Moradabad**, **agra** and **Meerut** divisions and at many places in **Gorakhpur**, **Varanasi**, **Lucknow** and at a few places in remaining divisions of U. P. on 10th July. Rain occurred at many places in **Lucknow**, **Bareilly**, **Kanpur** divisions and at a few places in remaining divisions of U. P. on 11th July. Rain occurred at many places in **Gorakhpur**, **Allahabad**, **Kanpur**, **Jhansi**, **Meerut** divisions and at a few places in remaining division of U.P. on 12th July.

Rain or thundershowers are likely to occur at many places over the State. Rainfall activity likely to decrease after 48 hours in west U.P.

Heavy to very heavy rainfall is likely at a few places over East Uttar Pradesh.

Advisories

- Postpone irrigation to **summer sugarcane**, **vegetables** and **mango** crops as rain or thundershowers are likely to occur at many places over the State with heavy to very heavy rainfall at a few places over East Uttar Pradesh.
- Continue sowing of **rice**, **maize**, **jowar**, **bajra**, **kharif pulses** and **oilseeds**.
- Continue harvesting of **sunflower**, **gram**, **urad**, and **mung** after current spells of rain.

- Make arrangement for quick drainage of excess water in standing crops in East U.P, if rains are heavy.

Himachal Pradesh

Precipitation occurred at many places in the State.

Rain / thundershowers are likely at many places over the State. Rainfall activity likely to decrease after 48 hours.

Advisories

- As rain / thundershowers are likely at many places over the State with heavy to very heavy rainfall at a few places, postpone intercultural operation, irrigation and application of fertilizer and plant protection measures to **maize, moong, apple** and **early sown vegetable** crops.
- Also postpone sowing of **bhindi, frenchbean** and transplanting of **brinjal, Capsicum** and **tomato** under prevailing weather condition.
- Drain out excess water from the field and continue preparation of land and transplanting of **rice** in the main field after current spells of rain.

Uttaranchal

Moderate to heavy rain was recorded at most places on 10th July and light to moderate rain was recorded at many places on 9th and 12th July and at a few places on 11th July and at isolated places on 6th July. Sky remained partly cloudy to overcast. Maximum temperatures were below normal by 2-4°C in the later half of the week.

Rain / thundershowers are likely at many places over the State. Rainfall activity likely to decrease after 48 hours.

Heavy to very heavy rainfall is likely at a few places over the State.

Advisories

- As rain / thundershowers are likely to occur at many places with heavy to very heavy rainfall at a few places over the State for the next three days, postpone irrigation to **mango, apple, sugarcane** and **vegetable crops**.
- Continue nursery sowing and transplanting of **rice & cauliflower** after current spell of rain.

Jammu & Kashmir

Light to moderate rain / thundershowers occurred at many places on 10th and 12th July with heavy falls at isolated places.

Rain / thundershowers likely to occur at many places in J & K State. Rainfall activity likely to decrease after 48 hours.

Heavy rainfall likely at isolated places.

Advisories

- Continue land preparation and sowing of **rice, maize** and **fodder crops** by utilizing monsoon showers.
- If nursery sowing cannot be undertaken, farmers are advised to go for direct sowing of rice in **Jammu division**.
- Light to moderate rainfall occurred at many places in the State during last week and rain/thundershowers are likely to occur at many places in J&K State. Under the circumstances postpone irrigation to **summer vegetables, pulses, rice** and **maize**.

Delhi

Moderate rain occurred on 10th & 11th July at most places. Moderate to heavy rain occurred on 12th July at most places.

Rain / thundershowers are likely at many places over the State. Rainfall activity likely to decrease after

48 hours.

Advisories

- As there was excess rain during last week and rain / thundershowers are likely at many places over the State with the chance of isolated heavy rain for next three days, postpone irrigation, intercultural operation and application of plant protection measures to **early sown summer vegetable crops, green gram, black gram, fodder crops and early sown arhar, maize and bajra.**
- Prepare land and continue sowing of **arhar, maize, bajra, fodder crops** and transplanting of **rice, cauliflower, cabbage, brinjal, tomato and chilly.**
- Select **arhar** varieties like Upas – 120, Manak and T21 and **maize** varieties like Ganga, Vikram and Kissan for sowing.

Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

South west monsoon was weak over the State on 10th July. Rain occurred at most places on 11th & 12th July and at many places on 10th July.

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

Isolated heavy rainfall also likely over the State.

Advisories

- Attack of **leaf folder, stem borer, gall fly, thrips, blast and sheath rot** is reported in **rice**. Spray Quinalphos 25 EC @ 750 ml / litre after current spells of rain to control **leaf folder, stem borer and thrips**. Spray Sevin 50% @ 3gm or Ekalux 25% @ 2ml / litre of water after current spells of rain to control **gall fly**.
- Attack of **bud rot and fruit rot (Mahali) diseases** is reported in **arcanut**. Continue spraying Boardeaux mixture 1% after current spells of rain to control the diseases.
- Attack of **Sigatoka leaf spot, bunchy top and pseudo stem weevil** is reported in **banana**. Spray 1 % Bordeaux mixture to control **leaf spot** after current spells of rain. Eradicate bunchy top affected plants to reduce the spread of the disease. Fill the leaf axils with chlorophyrphos @ 2.5 ml / litre of water to control **pseudo stem weevil** after current spells of rain.
- Attack of **pollu beetle and quick wilt** disease is reported in **pepper**. Spray Quinalphose 0.5 % to control the pest after current spells of rain. Apply Bordeaux mixture @ 1% after current spells of rain to control **quick wilt**.
- Attack of **stem bleeding and bud rot** disease and **red palm weevil** is reported in **coconut**. Chisel out the affected tissues and paint the wound with tridemorph 5 % and apply coal tar after 1-2 days to control stem bleeding. Use Indofil M-45, @ 4 gm per lit. of water for controlling **bud rot**. Use Pheramone trap to control **red palm weevil**. Spraying of chemicals may be undertaken after current spells of rain.
- Rainfall is likely to occur at most places in the State for the next three days. Under the circumstance, postpone irrigation to **plantation crops and pepper**. Arrange for drainage facilities to avoid water stagnation due to heavy rainfall.
- Continue fertilizer application in **pepper, rubber and banana** after current spells of rain.

Tamilnadu

Rainfall occurred at isolated places over the State on 10th, 11th and 12th July.

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

Advisories

- There was no significant rainfall in the State except in **Thirunelveli** district and rainfall is likely to occur only

at isolated places over Tamil Nadu for the next three days. Under the circumstances, apply required irrigation to cotton, early / mid sugarcane and millets to bring the soil moisture to its field capacity. Apply irrigation depending on the soil profile stored moisture in Thirunelveli district as there was excess rainfall during last week.

- Continue intercultural operations and application of fertilizers in millet crops.
- Harvesting of late season sugarcane may be continued.
- Farmers are advised to prepare the field and take up sowing of kharif crops like black gram, green gram, groundnut and kar / kuruvai rice nursery.
- Incidence of internode borer has been reported in sugarcane. Release Trichogramma parasite to control the pest.
- Stem borer egg masses and leaf sucking insects have been reported in already sown nursery in rice (kar/kuruvai). Adopt recommended plant protection measures.

Karnataka

Monsoon was weak over North Interior Karnataka on all days.

Rainfall occurred at most places on all the days over Coastal Karnataka. Over North Interior Karnataka, rainfall occurred at a few places on 12th July and at isolated places on 10th & 11th July. Over South Interior Karnataka, rainfall occurred at a few places on all the days.

Rain / thundershowers are likely at most places over Coastal Karnataka and at a few places over South Interior Karnataka and at isolated places over North Interior Karnataka.

Isolated heavy rainfall also likely over Coastal Karnataka.

Advisories

- Postpone irrigation and top dressing of Nitrogen in sugarcane in coastal Karnataka as rain/thundershowers are likely to occur at most places. Application of irrigation and top dressing of nitrogen may be continued on a non rainy day in south interior Karnataka depending upon the rainfall situation. These operations may be continued in north interior Karnataka also.
- Farmers are advised to continue sowing of kharif rice by utilising the monsoon showers. Arrange for drainage facilities to avoid water stagnation in case of heavy rainfall.
- Release predators like Dipha sp, adopt wider spacing and intercropping with soyabean and pulses of short duration for ratoon crop on a non rainy day in Mysore, Mandya, Hassan districts to control wooly aphids in sugarcane. Continue these operations in Bidar & Bagalkote districts also.

Andhra Pradesh

Rain occurred at a few places over Rayalaseema on 12th July. It was isolated over Coastal Andhra Pradesh on 7th, 9th to 12th July, over Rayalaseema on 11th July and over Telangana on 7th & 9th July. Weather was mainly dry elsewhere over the State during the week.

Rain / thundershowers are likely at isolated places over Andhra Pradesh.

Advisories

- As there was no significant rainfall in all districts of the State during last week and rain / thunder showers are likely to occur only at isolated places for the next three days, sowing of kharif crops may be continued with assured irrigation facilities.
- Stem borer incidence is noticed in rice nursery. Apply carbofuran granule @ 2kg / nursery to control the pest.

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

Assam

Light to moderate rain occurred at many places during the period with isolated very heavy falls on 11th and heavy falls on 12th July over the State.

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

Advisories

- As rain / thundershowers are likely at many places over the State, postpone irrigation, intercultural operation and application of fertilizer and plant protection measures to **sugarcane, summer vegetables, jute, maize and regular *ahu* rice.**
- Make arrangement for draining out excess water from the field under prevailing weather condition. Maintain 5 – 7 cm water in **early *ahu* rice** and **regular *ahu* rice** fields.
- Postpone harvesting of matured crops of **early *ahu* rice** under prevailing weather condition.
- Drain out excess water and continue sowing of **arhar** and sowing / transplanting of ***Sali* rice**. Select variety T-21 for sowing of **arhar**.

West Bengal

During last week Sub Himalayan West Bengal and Sikkim received normal and Gangetic West Bengal received excess rain. Most of the districts received excess rain except Midnapur, Darjeeling and Malda where it was deficient.

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

Advisories

- As rain / thundershowers are likely at many places over the State, postpone intercultural operation, irrigation and application of fertilizer and plant protection measures to **sugarcane, green gram, *aus* rice and jute.**
- Maintain 5 – 7 cm water in the ***aus* rice** field.
- Continue sowing of **groundnut** and nursery sowing / transplanting of ***aman* rice**.

Bihar

Heavy to very heavy rainfall occurred at few places over Bihar on 10th, 11th & 12th July. Light to moderate rain occurred at a few places over the State on rest days.

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

Heavy to very heavy rainfall is likely at few places over the State.

Advisories

- As rain / thundershowers are likely to occur at many places with heavy to very heavy rainfall at a few places over the State for the next three days, postpone irrigation to **vegetables, maize, pulses, and oilseed** crops.
- Continue sowing of short duration **rice** varieties like **Saket-4, Prabhat, Radhiva** etc. or photosensitive variety like **Ragani, Kamini** etc.
- Postpone application of top dressed Nitrogen in **maize, pulses and oilseeds**.
- Make arrangement for quick drainage of excess water in standing crops, if rains are heavy.

Jharkhand

Rains occurred at a few places.

Rain or thundershower is likely to occur at many places.

Advisories

- Nursery sowing / transplanting of **rice** may be continued.
- Continue sowing of upland crops like **rice, maize, finger millet, groundnut, arhar, and urad** etc.

Sikkim

Sky remained cloudy during the period.

Moderate to nearly heavy rain occurred at most places over **East Sikkim**. Rainfall was excess during the period.

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

Advisories

- Rain / thundershowers are likely to occur at many places over the State for the next three days. Under the circumstances, postpone irrigation to **orange, maize, potato** and **large cardamom** crops.
- Rouge out **chirke** and **foorkey** affected **large cardamom** plants and destroy them by burning.
- Continue transplanting **rice** seedlings by utilizing the monsoon showers in low hill areas. Arrange for drainage facilities in case of excess rainfall.

Arunachal Pradesh

Rain / thundershower occurred at most places on 6th, 7th, 8th and 11th and at many places on 9th, 10th and 12th July. Sky remained cloudy over the State during the week.

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

Advisories

- Continue harvesting of matured **maize** crop after current spells of rain.
- Maintain required depth of standing water in **wet seeded rice** field.
- Continue sowing of new **ginger** crop in some parts of high altitude, middle area and foothills of Arunachal Pradesh.

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

Gujarat

Gujarat region and Saurashtra & Kutch region received excess rainfall during last week. Normal / excess rain occurred in all the districts except in Panchmahal districts where it was deficient rain during last week.

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

Advisories

- As there was no significant rain in **Gandhinagar** and **Panchmahal** districts of Gujarat during last week and rain / thundershowers are likely at isolated places over the State for next three days, apply irrigation to **sugarcane** and **pre-monsoon irrigated cotton** in these districts. As other districts of the State received rain during last week, postpone irrigation in these districts.
- Continue land preparation and sowing of **Kharif groundnut, Kharif bajra, Kharif maize** and **Kharif cotton** and nursery sowing / transplanting of **Kharif rice** with the help of monsoon rain.
- Select high yielding varieties of **Kharif groundnut** like GG_2, 5, 7, 20 and GAU-10, resistant against downey mildew & high yielding varieties of **Kharif bajra** like GHB-15, 27, 235, 316 and MH-169, high yielding varieties of **Kharif maize** like Maize-1, 2, 4, 6 and Ganga safed – 2, Ganga – 11 and Pusa Hybrid – 1 and high yielding varieties of **Kharif cotton** like H-4, 6, 8, 10 and local varieties like Guj. Cotton-16, 17, 23 & Digvijay for South Gujarat, V-797, Guj. Cotton-13, 21 for North Gujarat and cottons local hybrid-7 for entire State.

Chattisgarh

All the districts of the State received **scanty** or **no rain** during last week.

Rain / thundershowers are likely at many places over northern parts of Chhattisgarh and at a few places over the rest region.

Advisories

- As all the districts of the State received no significant rain during last week and rain / thundershowers are likely at many places over northern parts of Chhattisgarh and at a few places over the rest region, postpone irrigation to **sugarcane**, and **early sown summer vegetables**, **green gram** and **black gram** in the districts of northern parts of the State and apply irrigation over the rest region depending on rainfall situation.
- Continue land preparation on a non-rainy day and sowing of **Kharif vegetables**, **red gram**, **green gram**, **black gram**, **soybean**, **groundnut** and nursery sowing of **Kharif rice** with the use of monsoon rain.
- Select early varieties like IR 36, MTU 1010, Purnima, Danteshwari etc or medium varieties like IR 64, Mahamaya, Bambleswar, MTU 1001 etc for **rice** and varieties like Asha, B.D.N-2, Laxmi -148, C-11 of **red gram**, J- 851, Pusa Vishal, BM-4, Malvia Jyoti 12 of **green gram**, KU – 96-3 TPU -4, TU -94-2, PU -30 of **black gram**, JS – 335, JS – 93-05, JS – 80-21 and Indira Soya – 9 of **soybean** and SB11, AK-24, TAG-26, AK- 159 of **groundnut** for sowing.

Maharashtra

Rainfall occurred at most places over Konkan, at many places over South Madhya Maharashtra, at few places over North Madhya Maharashtra & West Vidarbha and at isolated places over East Vidarbha and Marathwada.

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

Advisories

- As there was excess rain in **Nandurbar** and **Nasik** districts of the State during last week, postpone irrigation to **Sugarcane** and **Cotton (irrigated)** in these districts. As there was no significant rain in remaining districts of Madhya Maharashtra, Marathwada and Vidarbha and rain / thundershowers are likely at a few places over Madhya Maharashtra and Vidarbha and at isolated places in Marathwada, apply irrigation to the crops depending on rainfall situation.
- For the control of White Woolly Aphids in **sugarcane** release 2500 eggs or larvae of *Chrysoperla Carnea* or *Konobatra aphidivora* parasite on the leaves or spray Endosulphan @ 1 ml. plus Metasistox @ 1 ml. mixed in 1 liter water in Marathwada and on a non-rainy day in Madhya Maharashtra and Vidarbha region.
- Continue sowing of **jowar**, **Kharif groundnut**, **bajra**, **soybean**, **sunflower**, **kharif cotton**, **tur** and **moong** in Madhya Maharashtra, Marathwada and Vidarbha.
- Select the hybrid varieties from CSH 1, 5, 6, 9, 14, 17, 18, 23, CSH 8 R, SPV 86, 462, 946, PKV 801, 809 and SPH 388 for **jowar** and the varieties from SB 11, Phule Pragati, TMV 10, TAG 26, JL 24, JL 2620 and TPG 41 for **kharif groundnut**.
- Select the varieties from Saburi, BJ 104, BK 560, BD 763, WCC 75 and ICTP 8203 for **bajra**, from PKV 1, TAMS 38, MAUS 47, 61, 71 or 81, Phule Kalyani and Samruddhi for **soybean** and from EC 68414, Morden, SS 56, KBSH 11, Surya, PKV SF 9, or 27, SCH 35 for **sunflower**.
- Select the varieties from PA 402, American PH 348, Phule 492 or 388, JLH 168, JLA 794, Ganga, Parbhani Sona for **kharif cotton**, from T – Vishakha 1, TAT 10, Akola Hybrid 1, Vaishali 853, IPPL 87, AKT 8811, BDN 1& Vipula for **tur** and from TAP 7, TARM 2 or 18, AKM 8802 or 8803 for **moong**.

Madhya Pradesh

Rainfall occurred at many places in South East M.P. on 10th July, South M.P. on 11th July and West M.P. on 12th July, at a few places in West M.P. on 10th July, North M.P. on 11th July, South East M.P. on 12th July and at isolated places over rest of the State on remaining period.

Rain / thundershowers are likely at many places in East M. P. and at a few places in West M. P.

Advisories

- Continue sowing of **rice** and other *kharif* crops viz., **cotton, maize, soyabean, urad, rice, jowar**.
- As rain / thundershowers are likely at many places over East Madhya Pradesh for next three days, postpone irrigation to **sugarcane**. Apply irrigation in West Madhya Pradesh depending on rainfall situation.

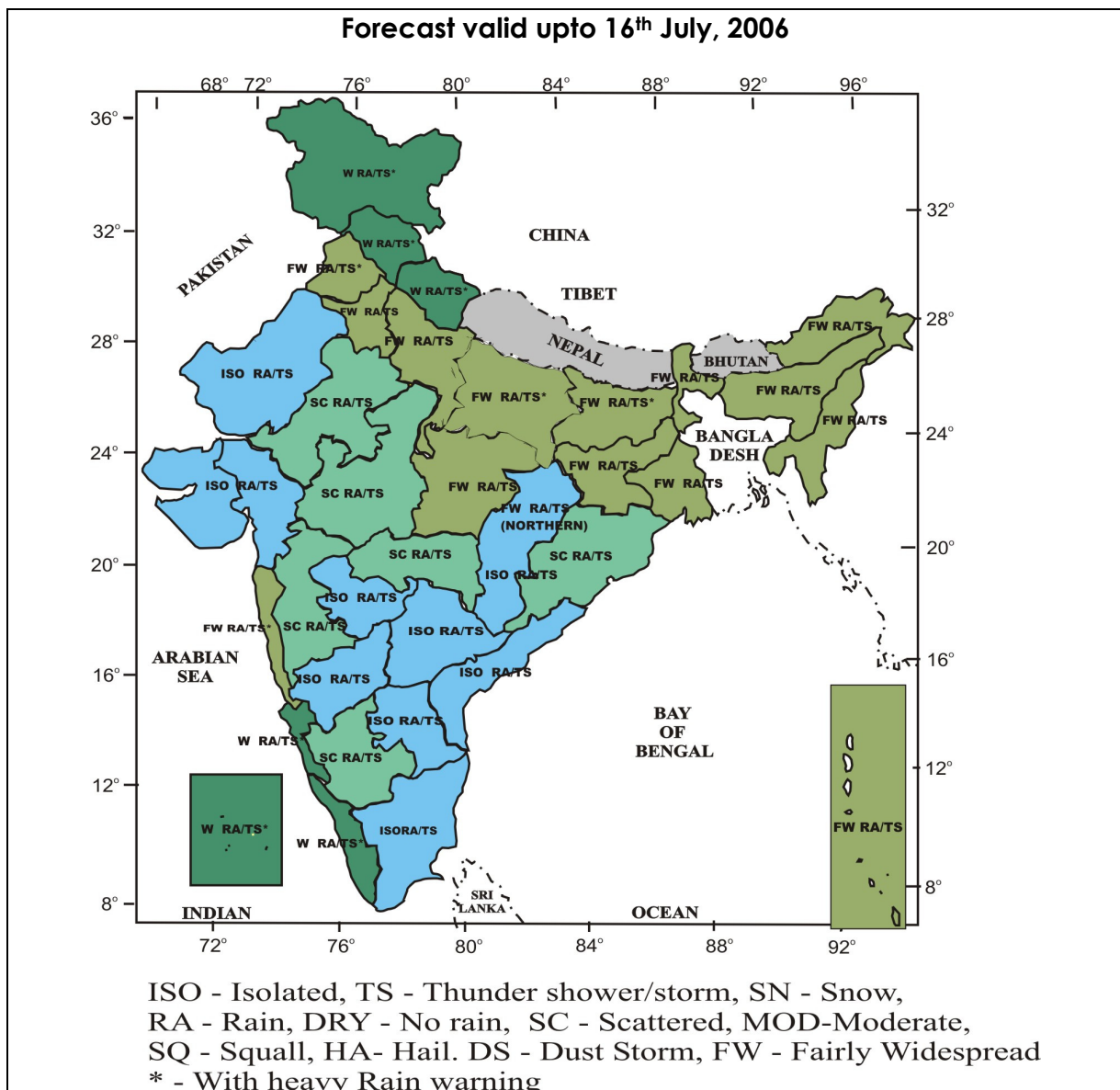
Orissa

Rain occurred at a few places over North Orissa on 10th July and at isolated places on the remaining days. Heavy rain fall occurred at isolated places over the State on 11th July.

Rain / thundershowers are likely at a few places over Orissa.

Advisories

- Farmers are advised to continue land preparation and sowing of *kharif* crops like **rice, groundnut and pulses**.
- Deficient rainfall occurred at many places over Orissa during last week and rain / thundershowers are likely at a few places over Orissa for next three days. Under the circumstances, apply irrigation to **vegetables, sugarcane and jute** crops, depending upon rainfall situation.
- 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 12/07/06

CHIEF FEATURES: The seasonal trough shifted to the north abruptly, with the dissipation of the depression, at the beginning of the week. 2) This also resulted in the gradual advance of monsoon over northwest India, outside west Rajasthan during 9th to 11th.

Southwest monsoon further advanced into: most parts of west Uttar Pradesh and some parts of Haryana including Delhi on 9th, some more parts of east Rajasthan, remaining parts of west Madhya Pradesh, entire Haryana and Punjab and some parts of west Rajasthan on 10th and into entire east Rajasthan and some more parts of west Rajasthan on 11th, when the northern limit of monsoon passed through Lat. 24.0° N/ Long. 60.0° E, Lat. 24.0° N/ Long. 68.0° E, Mount Abu, Ajmer, Churu and Ganganagar.

WEEK'S RAINFALL: Week's rainfall was excess in Gangetic West Bengal, Jharkhand, Bihar, Uttar Pradesh, Haryana, Himachal Pradesh, Jammu & Kashmir and Gujarat state; normal in Arunachal Pradesh, Nagaland-Manipur-Mizoram-Tripura, Sub-Himalayan West Bengal & Sikkim, Uttaranchal, east Rajasthan, coastal Karnataka and Lakshadweep. It was scanty over the rest of the country outside Assam & Meghalaya, Punjab, west Rajasthan, Konkan & Goa, Madhya Maharashtra, interior Karnataka and Kerala, where it was deficient.

PRINCIPAL AMOUNTS OF RAINFALL (in cms) DURING THE WEEK.

July 2006

6	Valsad 30, Gandevi 27, Songadh 23, Bhira 21, Datroj, Matheran 19, Passighat 18, Kamrej 17, Anklar 15, Kottigehara 14.
7	NH-31 42, Damohani 33, Kalayanpur 31, Jalpaiguri 25, Mohitnagar 21, Gajoldoba 20, Bhanvad 19, Kangra 18.
8	Karwar 16, Agumbe, Taibpur 14, Manki 13, Cooch Behar, Gorakhpur, Sujanputra, Gurusoppa 12, Bhalukpong, Jalpaiguri, Basirhat 11.
9	Jaunpur 35, Meja 34, Misrikh 31, Kangra 20, Nakashipara 19, Bareilly 18, Kandi 13, Narayanpur 12, Daltonganj, Katwar, Ranghat 11.
10	Burdwan 27, Durgapur 18, Bolepur, Sriniketan 17, Panagarh 16, Sharwain 11, Solan 9, Agumbe, Sirba 8, Kadra 7.
11	Tantloi 25, Narayanpur, Nagarkatta 15, Piravom 13, Agumbe, Cochi 12, Sirga, Bhagalpur 10, Nilkund, Sonpet, Nangal 9.
12	Bahadurgarh 11, Dum Dum, Munger 10, Nilkund, Khonsa, Alipur 9, Kollur, Mani 8, Kalimpong, Gaya, Uluberia 7, Vengurla 5.

SEASON'S RAINFALL (01-06-2006 to 12-07-2006): Season's rainfall was excess in Gujarat state and Madhya Maharashtra; normal in Nagaland-Manipur-Mizoram-Tripura, West Bengal & Sikkim, Orissa, Jharkhand, Bihar, Uttar Pradesh, Haryana, Himachal Pradesh, Jammu & Kashmir, Rajasthan, Konkan & Goa, Marathwada, Vidarbha, coastal Andhra Pradesh, Rayalaseema, Tamil Nadu, Karnataka, Kerala and Lakshadweep. It was deficient over the rest of the country outside east Madhya Pradesh, where it was scanty.

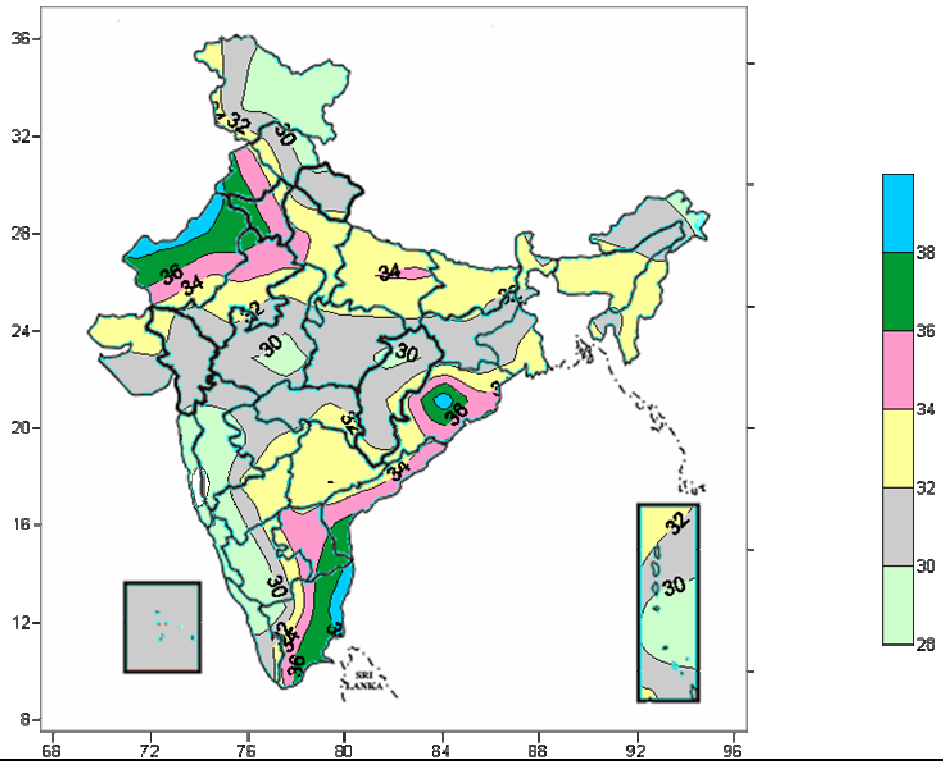
TEMPERATURES: In west Rajasthan, where the monsoon is yet to set in; Severe heat wave conditions prevailed on 1 day in some parts of southwest Rajasthan and day temperatures were appreciably below normal on 3 days and below normal on 2 days.

WEATHER AND ASSOCIATED SYNOPTIC FEATURES : (1) Last week's well marked low pressure area over south Rajasthan and adjoining west Madhya Pradesh became less marked on 6th. However, the associated upper air cyclonic circulation extending upto 3.1 km a.s.l. persisted there on 6th, lay over southwest Rajasthan and adjoining north Gujarat region on 7th and became less marked on 8th. (2) An upper air cyclonic circulation extending upto mid tropospheric levels lay over Gangetic West Bengal and neighbourhood on 9th & 10th. Under its influence, a low pressure area formed over there on 11th. Though it became less marked on 12th, the associated upper air cyclonic circulation extending upto mid tropospheric levels lay over the same area on 12th. (3) The seasonal east-west trough at sea level had shifted to the north and passed through northern parts of Rajasthan, Himachal Pradesh, Uttar Pradesh and thence eastwards to Arunachal Pradesh till 10th. Thereafter, the western end shifted southwards and passed through Rajasthan, Haryana, Uttar Pradesh, Jharkhand, Gangetic West Bengal and thence to northeast Bay. (4) The offshore trough at sea level extended from south Gujarat to Kerala/ Karnataka coasts all through the week. (5) An upper air cyclonic circulation lay between 0.9 & 3.1 km a.s.l. over: west Rajasthan and neighbourhood on 10th, Punjab and neighbourhood on 11th and over Punjab and adjoining Haryana on 12th. (6) The upper air cyclonic circulation over north Pakistan and adjoining Jammu & Kashmir moved away northeastwards across Jammu & Kashmir on 8th. (7) A fresh upper air cyclonic circulation extending upto 4.5 km a.s.l. lay over north Pakistan and adjoining Jammu & Kashmir on 9th and over Jammu & Kashmir and neighbourhood during 10th to 12th.

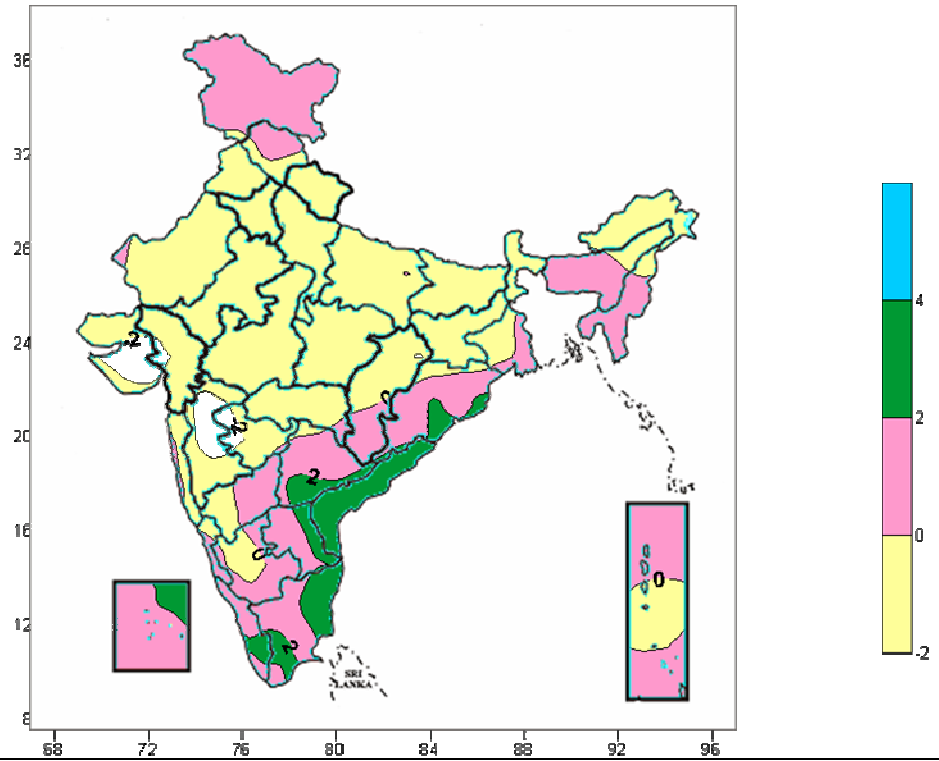
The southwest monsoon has been vigorous on 1 to 2 days in West Bengal & Sikkim, Haryana and Saurashtra & Kutch and active on 3 to 5 days in Nagaland-Manipur-Mizoram-Tripura, Gangetic West Bengal, Jharkhand, Bihar and Himachal Pradesh and on 1 to 2 days Arunachal Pradesh, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Haryana, Punjab, Saurashtra & Kutch and coastal Karnataka.

Very heavy rain occurred on 2 to 4 days in West Bengal & Sikkim, west Uttar Pradesh, Himachal Pradesh, east Rajasthan, Gujarat region and south interior Karnataka and on 1 day each in Arunachal Pradesh, Assam & Meghalaya, Nagaland-Manipur-Mizoram-Tripura, Bihar, east Uttar Pradesh, west Rajasthan, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra, coastal Karnataka and Kerala. Heavy rain also occurred on 3 to 5 days in Arunachal Pradesh, Assam & Meghalaya, Jharkhand, Bihar, Haryana, coastal & south interior Karnataka and on 1 to 2 days in Nagaland-Manipur-Mizoram-Tripura, West Bengal & Sikkim, Orissa, east Uttar Pradesh, Uttaranchal, Punjab, Himachal Pradesh, Rajasthan, west Madhya Pradesh, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra, Vidarbha, north interior Karnataka and Kerala. Rain or thundershowers occurred at most places on 4 to 7 days in Arunachal Pradesh, Gangetic West Bengal, Bihar, Konkan & Goa, coastal Karnataka and Kerala and on 1 to 3 days in Nagaland-Manipur-Mizoram-Tripura, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Uttar Pradesh, Uttaranchal, Haryana, Punjab, Himachal Pradesh, Jammu & Kashmir, Gujarat region, Saurashtra & Kutch, Madhya Maharashtra and Lakshadweep; at many places on 3 to 5 days in Arunachal Pradesh, Assam & Meghalaya, Nagaland-Manipur-Mizoram-Tripura, Sub-Himalayan West Bengal & Sikkim, west Madhya Pradesh and Madhya Maharashtra and on 1 to 2 days in Gangetic West Bengal, Jharkhand, Uttar Pradesh, Uttaranchal, Haryana, Himachal Pradesh, Jammu & Kashmir, east Rajasthan, east Madhya Pradesh and Gujarat region; at a few places on 3 to 5 days in Gujarat region, Madhya Maharashtra, interior Karnataka and Lakshadweep and on 1 to 2 days in Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland-Manipur-Mizoram-Tripura, Sub-Himalayan West Bengal & Sikkim, Orissa, Bihar, east Uttar Pradesh, Uttaranchal, Haryana, Punjab, Himachal Pradesh, Jammu & Kashmir, east Rajasthan, Madhya Pradesh, Marathwada, Vidarbha, Chattisgarh and Rayalaseema.

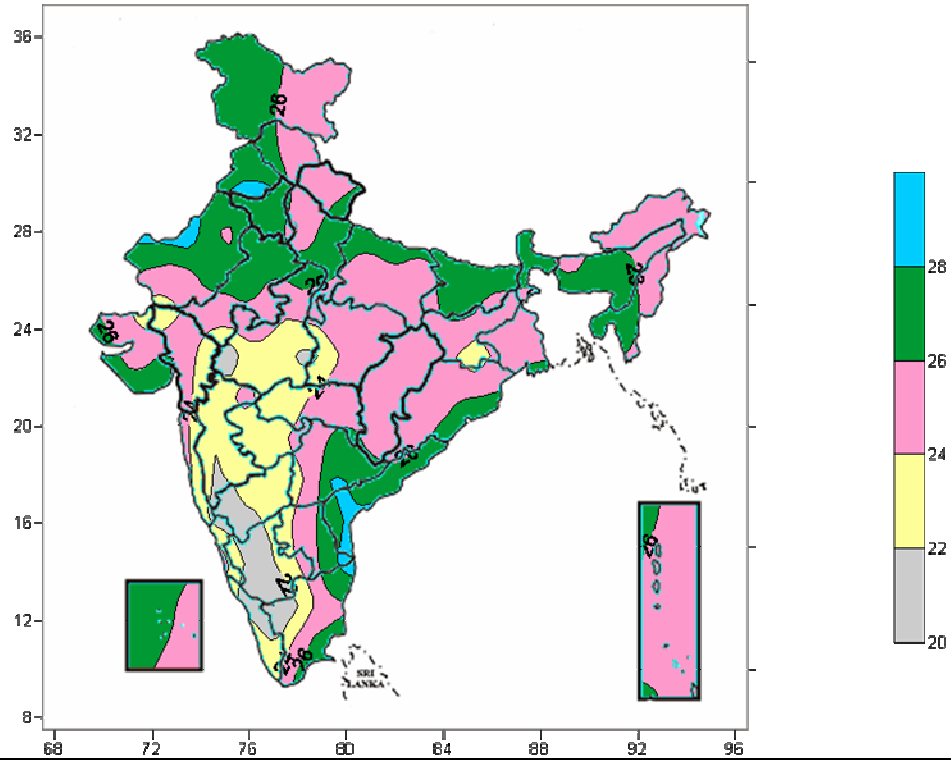
Actual mean maximum Temperature ($^{\circ}\text{C}$) In India for the week ending 12.07.06



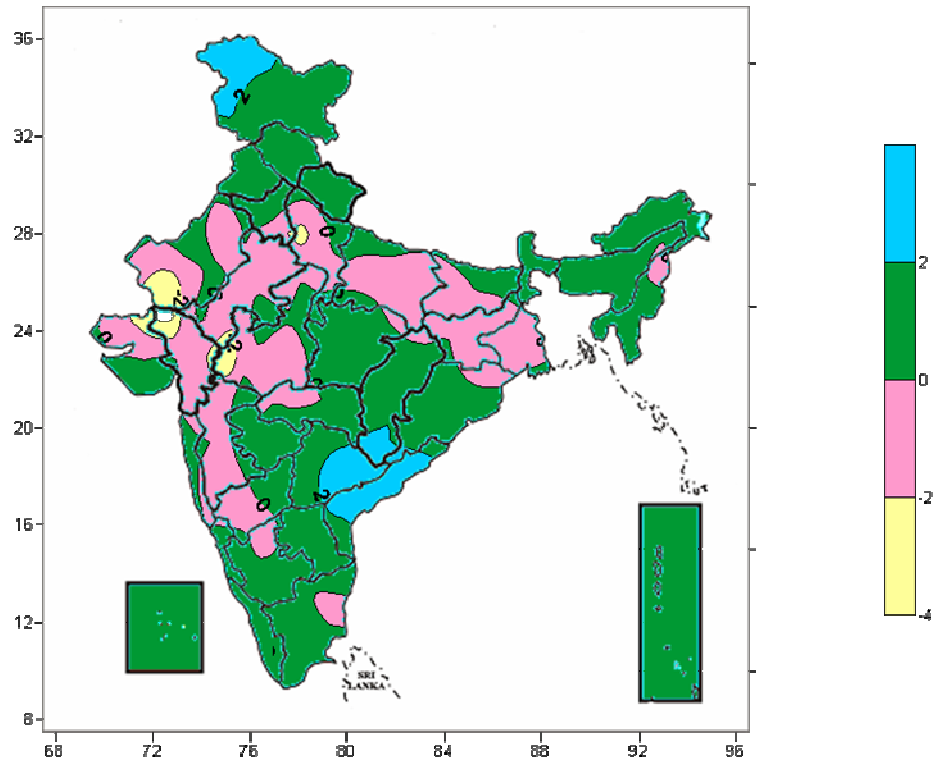
Maximum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 12.07.06



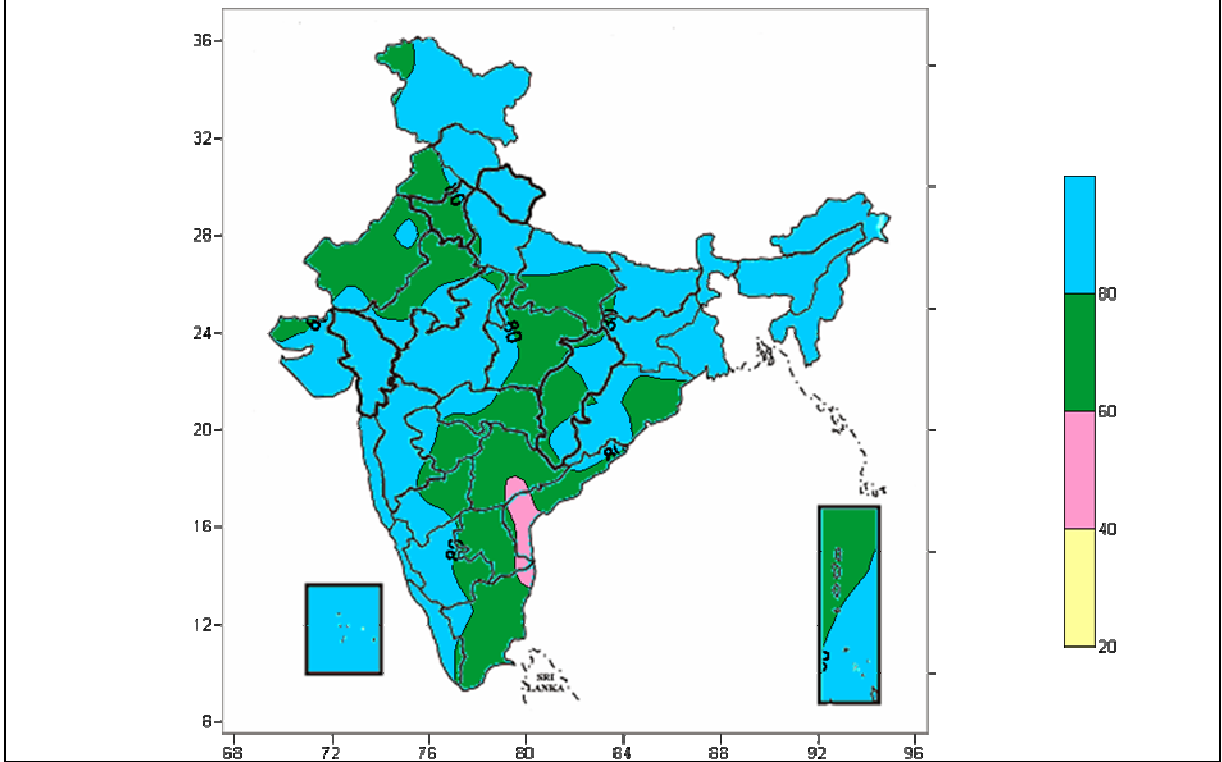
Actual mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 12.07.06



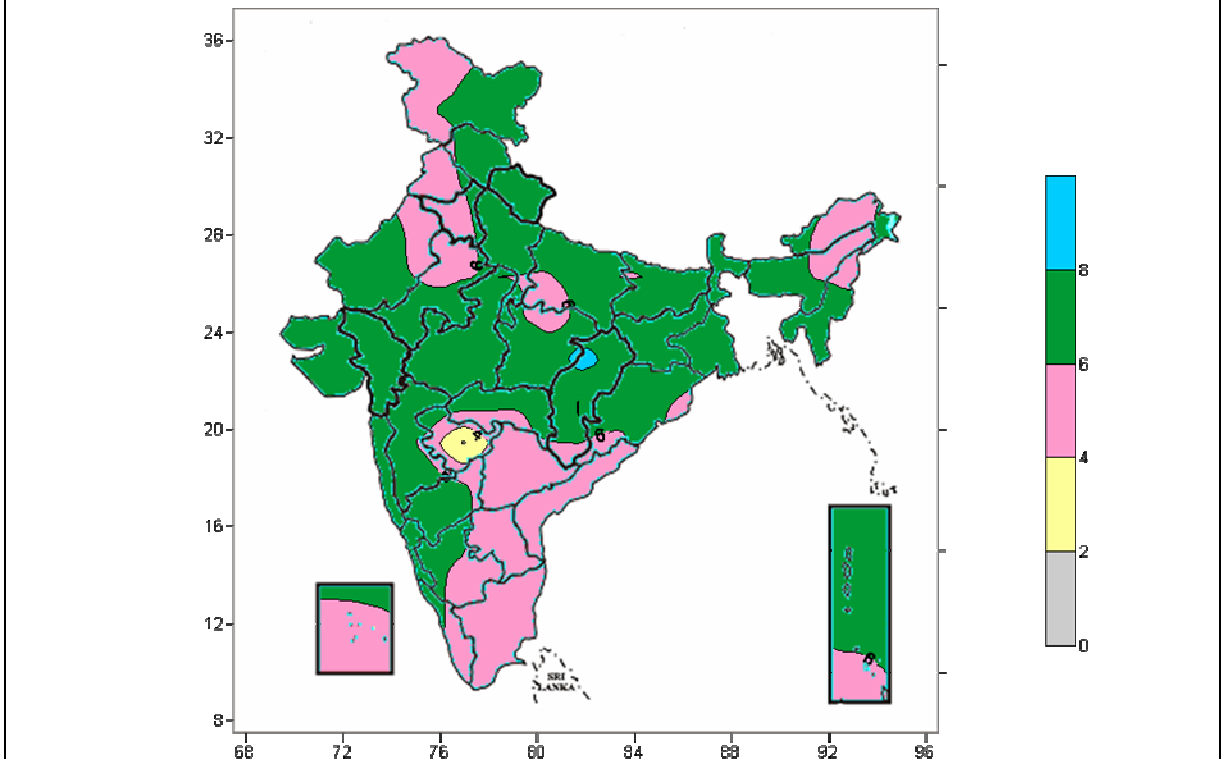
Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 12.07.06



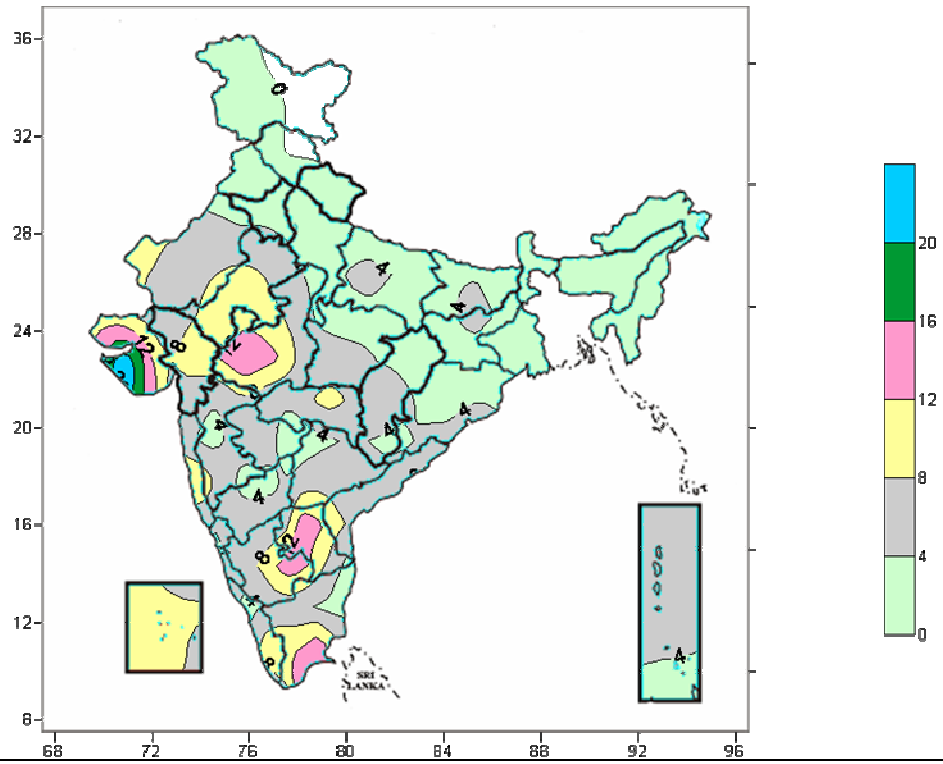
Relative humidity (%) over India for the week ending 12.07.06



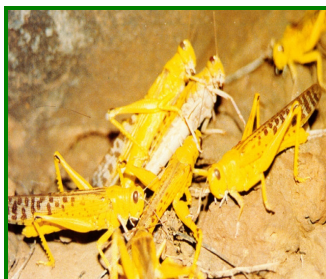
Cloud amount (okta) over India for the week ending 12.07.06



Wind speed (knots) over India for the week ending 12.07.06



Desert Locust Forecasting



Rainfall (mm)

Station Name	6.7.06	7.7.06	8.7.06	9.7.06	10.7.06	11.7.06	12.7.06
Amritsar	-	-	-	-	28	-	21.8
Barmer	-	-	-	-	-	-	-
Sriganganagar	-	-	-	-	12.6	2.8	-
Jaisalmer	-	-	-	-	-	-	-
Kota	-	-	-	-	-	-	-
Dessa	88.6	1.9	0.9	0.3	0.3	0.5	-
Churu	-	-	-	-	-	0.8	0.6

Temperature (degree celcius)

Station Name	6.7.06	7.7.06	8.7.06	9.7.06	10.7.06	11.7.06	12.7.06
Amritsar	33.5	33.5	33	33	30	27	27
Barmer	35.5	31.5	31	30	29.5	29.5	33
Sriganganagar	35.5	36	34	36	33	30.5	32.5
Jaisalmer	36.5	34	33	32	31.5	32.5	31
Kota	37	29.5	31.5	32	31.5	32	25
Dessa	36	24.5	27	27	26.5	27	26.5
Churu	-	-	-	-	-	-	-

Wind

Station Name	6.7.06		7.7.06		8.7.06		9.7.06		10.7.06		11.7.06		12.7.06	
	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.
Amritsar	-	-	6	SSW	-	-	-	-	13	SSE	-	-	-	-
Barmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sriganganagar	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jaisalmer	16	ENE	5	W	-	-	-	-	-	-	-	-	-	-
Kota	-	-	28	NW	-	-	-	-	33	W	-	-	WNW	29
Dessa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Churu	11	ESE	17	W	-	-	-	-	19	W	-	-	W	18

So far, monsoon rains have been poor along the **Indo-Pakistan** border which may limit summer breeding this year.

As rainfall was reported in some parts of Punjab, Gujarat & Rajasthan in this week there is mild chance of occurrence of locust incidence. It is advised to make continuous monitoring of the incidence of locust in north-western region of the country.

CROP – STATE – STAGE

Delhi

Vegetable crops	Summer vegetables	Arhar	Early sown arhar	Green gram, black gram
Vegetative / flowering / fruiting / harvesting	transplanting	sowing	Germination / early vegetative	Vegetative / flowering
Fodder (jowar, bajra)	Fodder (Mixed maize , Lobia)	Maize	Early sown maize	Rice
sowing	vegetative	Land preparation & sowing	Germination / seedling / early vegetative	Land preparation for transplanting
Bajra	Early sown bajra			
Land preparation & sowing	Germination / seedling / early vegetative			

Haryana

Sunflower	Sugarcane	Paddy	Maize	Cotton
Harvesting	Vegetative	Transplanting	Sowing / Germination	Vegetative
Bajra	Kharif pulses / groundnut			
Sowing	sowing			

Himachal Pradesh

Rice	Maize	Apple	Tomato, brinjal, ladies finger	Fodder crops
transplanting	early vegetative/ vegetative	Maturity / harvesting	flowering/ fruiting / harvesting	vegetative
Moong / Mash	Fruit plants			
flowering / pod formation	fruiting			

Jammu & Kashmir

Vegetables crops	Rice	Maize	Kharif crops	
Emergence / vegetative	Nursery preparation & sowing	Early vegetative / Vegetative	Land preparation & sowing	

Punjab

Sugarcane	Paddy	Maize	Cotton	Kharif pulses / groundnut
Vegetative	Transplanting	Sowing / germination	Vegetative	Sowing

Rajasthan

cotton	Groundnut	Bajra / Maize / Soyabean / Pulses		
Early Vegetative	Sowing	Sowing		

Uttar Pradesh

Pulses (Gram, Urad, Moong)	Kharif Pulses (Urad & Moong)	Sugarcane	Kharif Vegetables	Summer vegetables
Harvesting	Sowing	vegetative	Sowing	Vegetative/ fruiting / harvesting
Mango	New Mango	Kharif rice	Oilseeds	Kharif Oilseeds (Til, Soybean, Groundnut)
Harvesting	Active growth	Land preparation & nursery sowing	Harvesting	Sowing
Kharif Maize, Jowar, Bajra				
Sowing				

Uttaranchal

Rice & cauliflower	Mango	Lady's finger / French Bean	Sugarcane	Chilli & Tomato
Seedling	Maturity	Fruiting	Tillering	Fruiting / maturity
Apple				
Fruit growth				

Assam				
Maize	Sugarcane	jute	Summer vegetables	Early ahu rice
cob formation / maturity	Vegetative	Vegetative/maturity	vegetative / flowering / fruiting / harvesting	grain maturity / harvesting
Regular ahu rice	Arhar	Sali rice		
tillering / panicle initiation / flowering / grain formation	Sowing	sowing / transplanting		

Arunachal Pradesh				
Wet seeded rice	maize	Summer vegetables	ginger	millet
Vegetative	Harvesting	Harvesting	Sowing	Grain maturity
Jhum paddy				
Flowering / grain formation				

Bihar				
Vegetables	Rice	Maize	Pulses and Oil seeds	
Early vegetative	Sowing/ Seedling/ Transplanting	Vegetative	Early vegetative	

Jharkhand				
Rice	Upland crops (rice, maize, groundnut, arhar, urad)		Finger millet	
Nursery sowing	Sowing		sowing	

Sikkim				
Orange	Rice	Large Cardamom	Kharif vegetables	Potato
fruiting	Transplanting (low hills) Early tillering (high hills)	Seed formation	vegetative	Tuber Maturity / harvesting (in low & mid hills)
Maize	Ginger			
grain formation	Vegetative			

West Bengal				
Aus rice	sugarcane	Jute	Green Gram	Aman rice
Tillering/ panicle initiation/ flowering	vegetative	Vegetative	Vegetative / Flowering	Nursery sowing / transplanting
Groundnut				
Sowing				

Chattisgarh				
Chilly, Brinjal, Ladies finger	Kharif Vegetables	Sugarcane	Kharif rice	Soybean
(summer veg.- Vegetative / flowering / fruiting / harvesting)	Sowing / transplanting	Vegetative	Land preparation & nursery sowing / transplanting	Sowing
Green gram / Black gram(early sown)	Blackgram / Greengram	Groundnut	Red Gram	
Vegetative / flowering / pod formation	sowing	Sowing	sowing	

Gujarat				
Kharif Maize	Early sown Maize	Kharif groundnut	Early sown groundnut	Sugarcane
Land preparation & sowing	Germination/ seedling/ early vegetative	Land preparation & sowing	Germination/ seedling/ early vegetative	Vegetative / elongation

Kharif Cotton	Early sown cotton	Kharif bajra	Early sown bajra	Kharif Rice
Land preparation & sowing	Germination/ seedling/ early vegetative	Land preparation & sowing	Germination/ seedling/ early vegetative	Land preparation & nursery sowing / transplanting
Maharashtra				
Kharif Groundnut / Cotton / sunflower	Earlier sown Groundnut / cotton / sunflower	Irrigated Cotton	Sugarcane (Seasonal)	
Sowing	Germination	vegetative	Early vegetative	
Bajra / Jowar	Soybean	Earlier sown Soyabean	Kharif rice (Konkan)	Kharif rice (Madhya Maharashtra, Marathwada & Vidarbha)
Sowing	Sowing	Germination	Germination / Seedling / transplanting	Sowing / germination / seedling / transplanting
Earlier sown Bajra / Jowar	Tur	Earlier sown Tur	Moong	Earlier sown Moong
Germination	Sowing	Germination	Sowing	Germination
Madhya Pradesh				
Sugarcane	Moong	Kharif crops		
vegetative	Vegetative / flowering	Sowing / germination		
Orissa				
Vegetables	Earlier sown vegetables	Early sown Groundnut	Groundnut	Sugarcane (pre-seasonal)
Sowing / nursery	Flowering / fruiting / harvesting	Germination / early vegetative	Sowing	Vegetative/tillering
Kharif rice	Pulses	Early sown Pulses		jute
Sowing / nursery sowing / transplanting	Sowing	Germination / early vegetative		Vegetative
Andhra Pradesh				
	Kharif rice	Kharif crops (Groundnut/Maize/Chillies/Cotton /Tur)		
	Nursery sowing	Sowing		
Karnataka				
Early planted sugarcane	Sugarcane	Kharif crops (jowar, maize, cotton)	Kharif rice	Early sown rice
vegetative	Vegetative -ratoon crop	Germination / seedling / vegetative	Nursery sowing	transplanting
New sugarcane planting	Groundnut			
	Branching stage			
Kerala				
Rubber	Virippu Rice			
Tapping	Tillering			
Tamil Nadu				
Rice (Navarai)	Millets	Summer irrigated cotton	Early & mid sugarcane	Late season sugarcane
Grain Maturity	Vegetative	Flowering / boll formation	Vegetative / Grand growth	Maturity / Harvesting
Rice (Kuruvai)	Pulses	Groundnut		
Nursery / Transplanting	sowing	sowing		