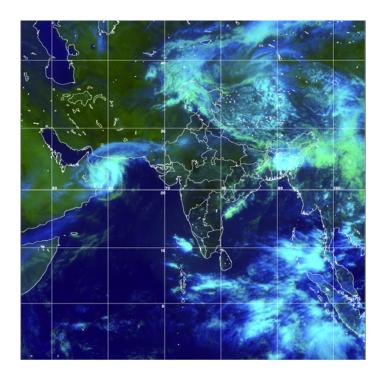


National Agromet Advisory Bulletin Thursday, 3rd June, 2010 (For the period 3rd to 7th June, 2010)

Satellite image 6 UTC Dated 4th June, 2010









Issued by
National Agrometeorological Advisory Service Centre
Agricultural Meteorology Division
India Meteorological Department
Shivajinagar
Pune

Executive Summary

Rainfall situation in some of the States in the country for the week ending 02.06.2010
Rainfall maps of some states representing (%) Departure

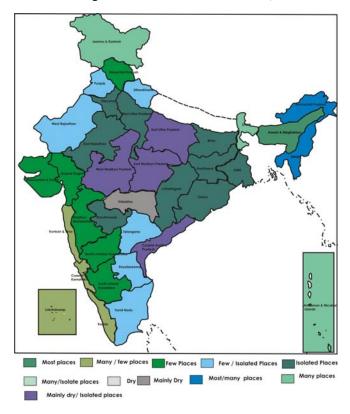
	1		senting (70) Departure
Kasargod -71	State/ Districts	Actual Rainfall (mm)	Assam Dhenual 10 Tolkerugan Timakin
Kannur Kerala	Kerala	(11111)	T KINDLEIL
-58		122.2	John Stronger
Wayanad	Alappuzha	133.2	Kokrajhar Najbari Darrang 68 Golophoft 3
Kozhikode -90	Kannur	44.6	27 Sorpeto 65 Morigania November 76
(Calicut) -17	Ernakulam	41.5	Dhubri Disspur 77
Malappuram - 83	Idukki	22.3	Goolpara Karbi
\ (Kasaragod	32.0	Anglong
Palakkad 95	Kollam	48.3	Cachar
-59	Kottayam	67.7	4
Thrissur	Kozhikode	102.1	Cacher
Ernakulam -70 ldukki	Pathanamthitta	44.0	Karimpani 186
Koch -77	Thiruvanantapuram	93.3	
Kottayam	Thrissur	47.4	- Commence
Alappuzha 46	Assam	1111	
21 Pathananttutta	Barpeta	136.9	
Kollam	Bongaigaon	112.5	
49	Cachar	252.9	
17	Dhubri		
THIRUVANANTHAPURAN		234.6	
	Dibrugarh	65.2	
	East Garo Hills	187.8	
	East Khasi Hills	294.2	
	Goalpara	159.9	
West Bengal	Golghat	81.5	
	Hailakandi	117.4	5
	Jorhat	71.2	East Siang Dibang Valley
	Kamrup	75.4	Upper West **
	Arunachal Pradesh		
Darjiing Introduced	Karbi Analog	63.8	Lower Subansin -1 28 -17 Namsai
Jalpaiguri 13	Karimganj	131.5	Tawang
Cooch Behør	Kokrajhar	197.9	-47 Kameng -72
23	Lakhimpur	73.3	West Kameng -29 Changlang
Uttar Dinjagur	Morigaon	105.6	300
7.	N.C.Hills	61.8	Khonsa
-18 Dokshin	Nalbari	107.6	(/~
Maldah	Nowgong	68.5	4
30	Sibsagar	95.0	
	Sonitpur	103.0	
	Tinsukia	65.8	Arunachal Pradesh
Murshidabag	West Bengal	05.0	Al ullachai i l'aucsii
Birbhum -15	GWB		
29	Bankura	31.0	
Burdwan Nadia	Birbhum	36.5	
Puruliva Bankura 190 119 North 24-	Burdwan	58.8	
24 Parganas			
	Hooghly	66.4	
Medinipur Howou	Murshidabad	24.0	<u>LEGEND</u>
Medinipur (West Midnapur) 77 Parganas 30	Nadia	61.6	LLOLIND
East Midnapur	24 Pargana (N)	43.8	EXCESS 20% OR MORE
	Purulia	23.4	
	24 Pargana (S)	21.7	NORMAL +19% TO - 19%
	SHWB	0.7.7	
	Coochbehar	95.2	DEFICIENT - 20% TO - 59%
	Darjeeling	66.0	SCANTY - 60% TO - 99%
	Jalpaiguri	101.4	The state of the s
	Malda	22.5	NO RAIN - 100%
	Dinajpur (S)	41.6	DATA NOT AVAILABLE
	North Sikkim	31.5	DAIN NOT AVAILABLE
	South Sikkim	14.4	

	1
G	Actual
State/ District	Rainfall
	(mm)
Himachal Pradesh	
Chamba	28.3
Kinnaur	41.5
Kullu	28.3
Lahaul and Spiti	48.4
Jammu &	
Kashmir	
Anantnag	114.4
Badgam	102.8
Doda	103.6
Kupwara	53.1
Pulwama	100.7
Srinagar	79.2
Udhampur	86.4
East Uttar	
Pradesh	
Barabanki	25.3
Lucknow	30.4
Pratapgarh	21.0
Sitapur	22.5
West Uttar	
Pradesh	
Bareilly	22.1

UttaraKhand	
Champawat	23.0
Garhwal Tehri	28.8
Nainital	21.0
Rudraprayag	25.2
Udham Sing Nagar	20.0
Bihar	
Bhagalpur	22.9
Khagadia	23.5
Madhepura	35.3
Patna	24.3
Supaul	94.8
Jharkhand	
Bokaro	37.2
East Singbhum	30.8
Maharashtra	
Konkan & Goa	
North Goa	59.7
South Goa	55.8
Madhya	
Maharashtra	
Pune	24.0
Orissa	
Dhenkanal	24.7
Kalahandi	24.8

Keonjhar	21.2
Karnataka	
Coastal	
Karnataka	
Dakshin Kannada	28.7
Udupi	29.2
Uttar Kannada	26.5
North Interior	
Karnataka	
Bagalkote	46.4
Belgaum	20.1
Gulbarga	22.1
South Interior	
Karnataka	
Bangalore Rural	25.4
Bangalore Urban	31.9
Chamarajnagar	25.1
Kolar	49.3
Tamil Nadu	
Dharmapuri	40.8
Kanyakumari	42.2
Namakkal	28.7
Salem	21.4
Virudhunagar	26.5

$Weather\ Forecast$ (Valid upto 1430 hours of $6^{th}\ June,\ 2010)$



Rainfall is likely to occur at most/many places over North East India, many places over Sub Himalayan West Bengal & Sikkim, Jammu & Kashmir, Andaman & Nicobar Islands at a few places over Himachal Pradesh, Gujarat, Saurashtra & Kutch, Madhya Maharashtra, Interior Karnataka, at a few places over Konkan & Goa, Coastal Karnataka, Kerala, Lakshadweep for next 48 hours and increase thereafter, at isolated places over Gangetic West Bengal, Orissa, Bihar, Jharkhand, West Uttar Pradesh, Haryana, Chandigarh, Delhi, East Rajasthan, Chhattisgarh, Marathwada, at isolated places over Punjab, Uttarakhand, West Rajasthan, for next 24 hours and increase thereafter, at isolated places over Telangana, Rayalaseema, Tamil Nadu & Pondicherry, for next 48 hours and increase thereafter, mainly dry weather over East Uttar Pradesh, West Madhya Pradesh, Coastal Andhra Pradesh for next 24 hours over East Madhya Pradesh for next 48 hours and isolated rainfall thereafter, mainly dry weather is likely to prevail over Vidarbha.

Warning

- Sea condition will be rough to very rough along and off Gujarat coast and adjoining north Arabian sea during next 48 hours. Fishermen are advised not to venture into the sea of this coast.
- Isolated heavy to very heavy rainfall would occur over Assam & Meghalaya and Arunachal Pradesh during next 48 hours.
- Thundersqualls may occur at isolated places over Punjab, Haryana, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, West Bengal & Sikkim and Orissa during next 48 hours.

Major crops in different States

- Summer rice is at grain maturity/harvesting in Orissa and harvesting in East Vidarbha.
- *Boro* rice is at maturity/harvesting stage in Chhattisgarh and West Bengal.
- Ahu rice is at tillering / panicle initiation stage in Assam.
- Jhum / WRC rice and pulses is at sowing and maize is at sowing / vegetative in Arunachal Pradesh.
- Rice is at nursery sowing in Kerala, Tamil Nadu.
- Potato is at tuberization stage and *rabi* potato is at maturity / harvesting in Sikkim.
- Summer green gram and black gram is at flowering / pod formation stage in Uttarakhand, Punjab, Haryana, Delhi, Rajasthan and at pod formation / maturity stage in Jharkhand, Orissa, West Bengal.
- Jute is at vegetative stage in Assam.
- Maize is at early vegetative in Uttarakhand and at vegetative stage in Assam.

Salient advisories

Advisories for sowing

- As monsoon arrived over Kerala, farmers are advised to undertake nursery sowing of rice and *kharif* vegetable crops utilizing the monsoon rainfall.
- Farmers in Problem Area zone in Kerala are advised to continue wet seeding of rice. Start transplanting of *virippu* rice in Central zone utilizing monsoon rainfall.
- Farmers in Hill zone, Lower and Upper Brahmaputra valley zone of Assam are advised to undertake sowing of *Sali* rice nursery and transplanting of *ahu* rice utilizing monsoon rainfall. Farmers in Central Brahmaputra Valley zone and North Bank Plain zone in Assam are advised to undertake sowing of jute and red gram, respectively, utilizing the monsoon rainfall.
- ➤ Due to receipt of good rainfall in Subtropical Hill zone of Arunachal Pradesh, farmers are advised to undertake sowing of *jhum*/WRC rice, maize, vegetable crops, sesame and pulses like black gram and green gram.
- Sowing/transplanting may be withheld at the time of heavy rainfall expected during next 48 hours in Assam and Arunachal Pradesh.

Advisories based on pre-monsoon showers

- Farmers in Hill zone of Karnataka are advised to take up sowing of cowpea, green gram, sesamum and ragi crops as good amount of rainfall (120 mm) was received during last few weeks.
- > Due to pre-monsoon rainfall, farmers are advised to start land preparation and procure certified seeds of cowpea, green gram, black gram, sesamum, sorghum and cotton for sowing in Karnataka.
- Farmers in Scarce Rainfall zone of Andhra Pradesh are advised to start land preparation and arrange for inputs for sowing of groundnut as monsoon is fast approaching.
- Farmers are advised to prepare the nursery bed for *aus* rice in new alluvial zone and laterite and red soil zone utilizing last week rainfall.
- Farmers in terai zone and laterite and red soil zone in West Bengal are advised to undertake sowing of *aman* rice in nursery with the help of last week rain. Start land preparation for direct sowing of *aus* rice.
- Farmers in Uttarakhand may undertake sowing of rice and finger millet utilizing the last week rainfall. Undertake transplanting if the nursery seedlings are 25 days old.

Zonewise Agromet Advisories

NORTH WEST INDIA [J & K, H. P., UTTARAKHAND, PUNJAB, HARYANA, DELHI, UP, RAJASTHAN]

- Realised Rainfall: Rain occurred in most of the districts in, Jammu & Kashmir, Chamba, Kinnaur, Kullu, Lahaul and Spiti and Mandi districts in Himachal Pradesh, Barabanki, Lucknow, Sitapur and Bijnor districts in Uttar Pradesh, Champawat, Garhwal Tehri, Nainital, Rudraprayag and Udham Sing Nagar in Uttrakhand. No significant rainfall occurred in the remaining parts of the region during last week.
- Rainfall Forecast: Rainfall is likely at many places in Jammu & Kashmir, at a few places in Himachal Pradesh and isolated places in Haryana, Delhi, East Rajasthan and West Uttar Pradesh during next three days. Isolated rainfall is likely during next 24 hours in West Rajasthan, Punjab and Uttarakhand and at a few places thereafter. Either isolated rain will occur or mainly dry weather will prevail over East Uttar Pradesh during the period. Isolated to scattered rain/thunderstorms/duststorm would occur over Punjab, Haryana, Uttar Pradesh and Rajasthan. Thundersqualls may occur at isolated places over Punjab, Haryana, Uttar Pradesh and Rajasthan during next 48 hours.

• Major Crops:

- ➤ Vegetables (sowing / nursery sowing / vegetative) in Himachal Pradesh.
- > Vegetable crops (flowering / fruiting / harvesting) in Jammu & Kashmir.
- Maize (early vegetative), black gram and green gram (flowering/pod formation) in Uttarakhand.
- Sugarcane (vegetative), cotton, maize (early vegetative), black gram and green gram (vegetative/vegetative), sunflower (vegetative) in Punjab.
- Sugarcane (vegetative), black gram and green gram (flowering / pod formation) in Haryana.
- > Green gram and black gram (flowering / pod formation) and vegetable crops (fruiting / harvesting) in Delhi.
- Sugarcane (vegetative), sunflower, black gram and green gram (pod formation), vegetable crops (sowing) in Uttar Pradesh.
- > Green gram (pod formation), vegetable crops (flowering / fruiting / harvesting) in Rajasthan.

Advisory:

- Farmers are advised to postpone irrigation, intercultural operations and pesticide application to the standing crops as rainfall is likely at many places in Jammu & Kashmir during next three days. As rain occurred in Chamba, Kinnaur, Kullu, Lahaul and Spiti and Mandi districts in Himachal Pradesh, Barabanki, Lucknow, Sitapur and Bijnor districts in Uttar Pradesh, Champawat, Garhwal Tehri, Nainital, Rudraprayag and Udham Singh Nagar in Uttrakhand, postpone irrigation to the crops in these districts. In view of dry weather conditions prevailed in remaining districts of the States in the region, farmers are advised to apply irrigation to the standing crops.
- ➤ Undertake sowing of late varieties of cotton under irrigated conditions in Delhi, Haryana and Rajasthan.

- Farmers in Punjab are advised to undertake sowing of groundnut up to June 10 after applying presowing irrigation under irrigated conditions.
- Complete sowing of rajmah and other crops in Himachal Pradesh as temperature is optimum for germination.
- Farmers are advised to undertake transplanting of vegetable crops like tomato, brinjal, capsicum and chillies, sowing of ageti bhindi (var. Prabhini kranti, Arka anamika,) and direct sowing of Khira, bitter gourd, tori in Himachal Pradesh. Also undertake nursery sowing and transplanting of brinjal (Arka Nidhi, PPC), Shimla mirch (California wonder), pepper (Surjmukhi) and tomato in polyhouses is advised in view of ensuing weather. It is time for sowing of nursery in areas where summer vegetables like brinjal Shimla mirch, pepper and tomato are taken as rainfed crop during rainy season. It is also time for sowing of ginger, arbi, amaranthus and turmeric.
- Farmers in Delhi are advised to start preparation for nursery sowing of paddy.
- Undertake sowing of pigeon pea varieties like Pusa 2001, Pusa 991 and Pusa 992, Paras, Manak and UPAS 120 during this week.
- Farmers in Rajasthan are advised to undertake sowing of groundnut.
- Farmers in Uttarakhand may undertake sowing of rice and finger millet utilizing the last week rainfall. Undertake transplanting if the nursery seedlings are 25 days old.
- Farmers are advised to continue field preparation and nursery sowing of rice in sub tropical areas of Jammu. Select varieties like IET-1410, K-39, Ratna, PC-19, Jaya RR-8585, Basmati 370 and Ranbir Basmati). Undertake transplanting of rice utilizing last week rainfall. Prepare the field and undertake sowing of maize, moong and cowpea.
- In view the forecasted dust storm / thunderstorm in Punjab, Haryana, Uttar Pradesh and Rajasthan, farmers are advised to postpone spraying operations.

EAST INDIA [JHARKHAND, BIHAR, ORISSA, WEST BENGAL & SIKKIM]

- Realised Rainfall: Bhagalpur, Khagadia, Madhepura, Patna and Supaul districts of Bihar, Bokaro and East Singbhum districts of Jharkhand, Kalahandi, Dhenkanal and Keonjhar districts in Orissa and most of the districts in Gangetic West Bengal received good rainfall during last week. No significant rain occurred over remaining parts of the region.
- Rainfall Forecast: Rain is likely to occur at many places over Sub Himalayan West Bengal and Sikkim and at isolated places over remaining States of the region during next three days. Scattered thunderstorms/duststorm will occur over Bihar from tomorrow. Thundersqualls may occur at isolated places over Bihar, Jharkhand, West Bengal, Sikkim and Orissa during next 48 hours.

• Major Rabi Crops:

- Maize (maturity / harvesting) and moong (maturity/harvesting) in Bihar.
- Green gram and black gram (pod formation / maturity) in Jharkhand.
- ➤ Black gram and green gram (pod formation / maturity), groundnut (maturity), maize (maturity) and late summer rice (early maturity) in Orissa.
- > Sugarcane (vegetative), vegetable crops (vegetative / flowering / fruiting / harvesting), boro rice (maturity / harvesting), black gram and green gram (grain formation / early maturity / maturity / harvesting), sunflower (seed formation / early maturity / maturity / maturity / maturity / harvesting) in West Bengal.
- ➤ High hills (1500- 2000 m) in Sikkim: large cardamom (primary flowering / secondary flowering), seed potato (tuberization), summer potato (Very High Hills) (tuberization), *kharif* vegetables & off season vegetables (vegetative / late vegetative), maize (vegetative / late vegetative); Medium hills (1000 1500 m): large cardamom (primary flowering / secondary flowering), *Rabi* potatoes (maturity / harvesting), maize (late vegetative / tasseling / silking / cob formation), *kharif* vegetable (vegetative), ginger (germination/early vegetative), rice (sowing / nursery sowing); Low Hills (Below 1000 m): large cardamom (vegetative / primary flowering / secondary flowering), *Rabi* potatoes (maturity / harvesting), wheat (harvesting), maize (early vegetative / vegetative / tasseling / silking / cob formation), *kharif* vegetable (transplanting / vegetative), ginger (sowing / germination).

• Advisories:

- As Bhagalpur, Khagadia, Madhepura, Patna and Supaul districts of Bihar, Bokaro and East Singbhum districts of Jharkhand, Kalahandi, Dhenkanal and Keonjhar districts in Orissa and most of the districts in Gangetic West Bengal received good rainfall during last week, postpone irrigation to the crops in these regions. Postpone irrigation in Sub Himalayan West Bengal and Sikkim as rain is likely at many places over these region. Apply irrigation to the standing crops in remaining region as there is less possibility of rainfall during coming days.
- ➤ Undertake harvesting of summer rice, maize, green gram, black gram and groundnut in Orissa and maize in Bihar. Postpone harvesting of summer rice, sesame and green gram in West Bengal as there is chance of rainfall during next three days.
- Farmers are advised to keep the harvested produce at safer place in view of thunder squall over the region during next 48 hours.
- Farmers are advised to prepare the land for nursery bed for transplanted *aus* rice in new alluvial zone and direct sowing in laterite and red soil zone utilizing last week rainfall.
- Farmers are advised to plough and harrow the field and undertake sowing of semi dry rice in coastal saline zone in West Bengal utilizing last week rainfall.
- ➤ With the help of last week rain in terai zone and laterite and red soil zone, sowing of *aman* rice in the seed bed may be continued in West Bengal. Select short and medium duration varieties like Annada, P.N.R-519, Satabdi, Sita, Kunti, Radha, Ranjit, Swarna, Kanak etc
- ➤ Land preparation may be started for sowing of *kharif* maize and undertake sowing of rice in nursery in Sikkim utilizing rainfall during last week.
- Farmers are advised to undertake field preparation and sowing of long duration rice varieties like Pankaj, Nata Mansuri and Swarna (MTU 7029) in nursery and maize varieties like Ganga Safad-2, Ganga -11 and Swan etc. in Bihar utilizing last week rainfall. Prepare the field for sowing of *kharif* arhar, til and sorghum.
- Farmers in Orissa are advised to undertake field preparation for nursery sowing/direct sowing of rice varieties like Extra early: Kaling-3, Early: Khandagiri, Bandana, Pathara, Parijat, Annada, Medium: MTU-1001, MTU-1010, Konark, Gajapati, Surendra, Lalat, Late: CR-1009, CR-1018, Swarna (MTU-7029), Indravati, Mahanadi, Puja, Ramachandi, Kanchana, Sarala, Lunishree, Fine varieties: CR-1014, BPT-5204 and maize varieties like Navjot, Shakti, Decan-107 and Decan-109 utilizing last week rainfall. Undertake field preparation for nursery sowing of rice, ragi and maize under rainfed condition.
- ➤ Due to the cloudy weather and high humidity, stem rot and downy mildew symptoms was observed in pointed gourd in West Bengal. Spray Metalaxyl MZ 75 @ 1.5g + Mancozeb @ 2.5g per litre of water at 10 days interval. To control stem rot in pointed gourd apply 1g plantomycin per litre of water. Undertake spraying after current spells of rain as rain is likely during next three days.

NORTHEAST INDIA [ARUNACHAL PRADESH, NMM & T, ASSAM, MEGHALAYA]

- Realised Rainfall: Rainfall occurred in most of the districts of the states in the region during last week.
- **Rainfall Forecast:** Rainfall is likely to occur at most / many places in the region. Isolated heavy to very heavy rainfall will occur over northeaster states during next 48 hours.

• Major Crops:

- Vegetables (flowering / fruiting / harvesting), sugarcane (cane development), maize, jute, mesta (vegetative) in Assam. This is proper time for nursery sowing of *Sali* rice.
- ➤ Jhum / WRC rice, pulses and vegetables (sowing) and maize (sowing / vegetative) in Arunachal Pradesh.

Advisory:

- As there was rainfall during last couple of weeks in most of the districts of this region and there is also possibility of rain / thundershower over the region for next three days, postpone irrigation to the standing crops. In view of rainfall to be likely at most / many places along with isolated heavy to very heavy rainfall, arrange for draining out excess water from the fields to avoid water stagnation.
- Farmers are also advised to postpone intercultural operation, application of fertilizers and plant protection measures to maize and jute.

- Farmers in Hill zone, Lower and Upper Brahmaputra valley zone of Assam are advised to undertake sowing of *Sali* rice nursery and transplanting of *ahu* rice utilizing the recent rainfall. Sowing of *Sali* rice and transplanting of *ahu* rice may be withheld at the time of heavy rainfall expected during next 48 hours.
- Farmers in Central Brahmaputra Valley zone and North Bank Plain zone in Assam are advised to undertake sowing of jute and red gram, respectively, utilizing the recent rainfall. Sowing may be withheld at the time of heavy rainfall expected during next 48 hours.
- Farmers are also advised to drain out excess water from maize fields and from the root zone of citrus and cucurbitaceous crops to avoid fungal diseases likely to occur in these prevailing rainy days.
- ➤ Due to receipt of good rainfall in Subtropical Hill zone of Arunachal Pradesh, farmers are advised to undertake sowing of *jhum*/WRC rice, maize, vegetable crops and pulses like black gram and green gram and sesame. Sowing may be withheld at the time of heavy rainfall expected during next 48 hours.

SOUTH INDIA [TN, AP, KERALA, KARNATAKA, LAKSHADWEEP, ANDAMAN & NICOBAR ISLANDS]

Forecast: Either isolated rain will occur or dry or mainly dry weather will prevail over the region during the period except Kerala where rain/thundershowers is likely to occur at a few places.

Crop Stage:

- Cotton is at boll maturity/picking and other *rabi* crops are at grain development/ maturity stage in Andhra Pradesh.
- Pigeon pea and sunflower (maturity / harvesting), Vegetables (Flowering / fruiting / harvesting), *Rabi* Sorghum (grain development / maturity), Bengal gram (maturity / harvesting) in Karnataka.
- Rice (grain maturity/harvesting), Vegetables (flowering / fruiting / harvesting) and plantation crops (coconut, arecanut, pepper and cashew) in Kerala.
- Rice (grain development), pulses (pod maturity), cotton (picking) in Tamil Nadu.

> Advisories:

- As there was no rainfall during last week and dry weather/ no significant rainfall is likely for the next five days, farmers in Andhra Pradesh, Karnataka, Tamil Nadu and Kerala except in Alapuzha, Ernakulam, Kottayam and Pathanamthitta districts are advised to apply irrigation to standing *rabi* crops and horticultural / plantation crops. As there was sufficient rainfall during last week in the districts mentioned in Kerala, postpone irrigation to the standing crops.
- ➤ Heat wave conditions prevail over Telangana region in Andhra Pradesh. Farmers are advised to apply light and frequent irrigation to overcome heat injury on standing crops.
- ➤ Undertake harvesting of summer green gram and black gram in Northeast transition zone of Karnataka. After harvesting, undertake summer ploughing to kill pupae and to destroy soil borne pathogens.
- > Since forecast of increasing wind speed in Hill zone of Karnataka, there is possibility of falling of plants. Therefore farmers are advised to go for staking with sticks.
- Farmers in Central Dry zone of Karnataka are advised to apply irrigation to arecanut and coconut and pepper as temperature is increasing and to avoid sun scorching.
- Farmers in Central zone of Kerala are advised to undertake mulching in the coconut basin using husks to reduce evapotranspiration. Coir pith @ 25 kg/palm is an ideal mulching material to preserve moisture. Irrigation can be continued.
- ➤ Banana bunches should be covered with leaves to prevent sun scorching.
- Farmers in north eastern zone in Tamil Nadu are advised to spray 0.5% of Potassium Chloride to withstand the moisture scarcity.
- ➤ Under present weather condition incidence of early shoot borer is noticed in sugarcane in Southern Telangana zone. To control, adopt IPM measures.
- ➤ Prevailing weather conditions are congenial for the incidence and spread of yellow and red spider mites. To control, spray Wettable Sulphur @ 3 g per litre of water to cover the under surface of the leaves.
- ➤ Dry conditions in Kerala may favour the multiplication of white flies and jassids which act as vectors for spreading crinkling in cucurbits especially bitter gourd. Spraying of neem oil + castor oil garlic emulsion may be undertaken.

- ➤ Dryness can aggravate the incidence of pests like aphids, mites etc. in vegetables in Kerala. Farmers are advised to look out for symptoms like leaf crinkling, brittleness / rough leaves etc. Placing a yellow board smeared with castor oil among the vegetable crops will help to control the pests causing this condition.
- Weather conditions are favourable for wide spread occurrence of stem borer and black bug in summer rice crop in Cauvery Delta zone of Tamil Nadu; spray Acephate @ 1g/litre of water along with sticking agent in the evening using hand sprayer. In rice fallow cotton present weather conditions are favourable for occurrence of jassids, thrips, hoppers, and white flies. To check the prevalence of these insects use yellow trap smeared with castor oil or white grease and spray any one of the blue labelled systemic insecticide along with sticking agent at recommended dose.

• Animal Husbandry

• Andhra Pradesh

- To minimize the summer effect on poultry birds, the following management practices need to be adopted
 - Arrange fans and foggers in sheds.
 - Cover the sheds with rice straw and arrange sprinklers.
 - Feed poultry birds with wet mash to increase the feed intake.
 - Provide cool water for drinking.

Karnataka

- ➤ Due to increase in day temperature from 34° to 35°C in poultry farm, there is a probability of drop in feed intake, drops in egg weight and deterioration in shell quality. So farmers are advised to maintain optimum temperature between 18° and 29° C in poultry sheds for better production.
- ➤ Due to high day temperature between 36°-37°C, the dairy farmers are advised not to allow grazing of animals between 12 pm to 5 pm, and also advised to supply adequate quantity of drinking water, sprinkle the water on the animals before milking & keep the floor cool and clean. Calves may be dewormed during summer months to increase the appetite of the animals.

Kerala

Milch cows should be given proper protection against high temperature. Give more water to drink. Keep the body of the cattle cool by frequent watering. Tie the animals under shade. Farmers are advised to get their cattle vaccinated against the Foot and Mouth Disease. This should be done essentially before the rainy season starts.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]

- **Realised Rainfall:** No significant rain occurred in most of the districts of the States except Pune, North Goa and South Goa district of this region.
- Rainfall Forecast: Rain is likely at a few places in Konkan and Goa during next two days and at many places thereafter. Rain is likely at a few places in Gujarat State and Madhya Maharashtra. Either isolated rain will occur or mainly dry weather will prevail over Marathwada and Vidarbha region during the period.

Major Crops:

- Maharashtra: Vegetables (vegetative/flowering/fruiting /harvesting) and summer rice (harvesting in East Vidarbha), summer groundnut, summer sunflower & summer maize (harvesting in final stage).
- ➤ Gujarat: Green gram (pod maturity / harvesting), summer groundnut (pod development), sugarcane (vegetative) and vegetables (vegetative / flowering / fruiting / harvesting).

Advisory:

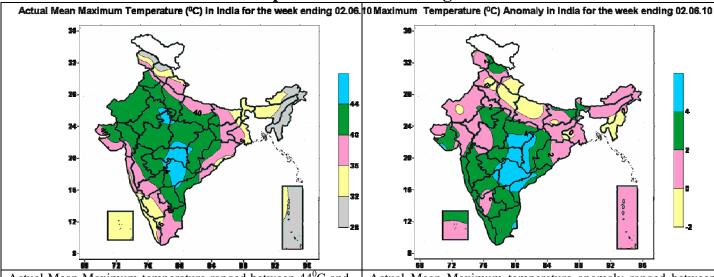
- As rain is likely in Konkan and Goa, postpone irrigation to the standing crops. No significant rain occurred in most of the districts of the States except Pune, North Goa and South Goa district of this region, apply irrigation to the crops. Postpone irrigation to the crops in above mentioned districts in view of last week rainfall
- As there was rain in some pockets of Konkan, Madhya Maharashtra, Marathwada, west Vidarbha and Gujarat during last 3-4 days, farmers are advised to undertake nursery preparation for sowing of rice. Select early varieties from Karjat-4, 184, Ratnagiri-24, Ratna & Pawana in Konkan and midlate variety like Phule

- Samrudhi, Indrayani & Pusa Basmati in Pune division in Maharashtra and Sukhvel–20, GR-3, 4, 6, 7 and late matured cultivar like GR–101, 102, 103, 104, Narmada and Masuri in Gujarat.
- Farmers are advised to prepare field utilizing last week rainfall and arrange improved and high yield variety for sowing of *kharif* paddy, jowar, bajra, groundnut, soyabean, sunflower, *kharif* cotton, red gram and moong etc.
- Farmers are advised to harvest the matured summer crops at the earliest and store in safe place in view of expected rainfall during next three days.
- Farmers in Maharashtra are advised to undertake the sowing of Bt cotton upto 15th June.

CENTRAL INDIA [M.P., CHHATTISGARH]

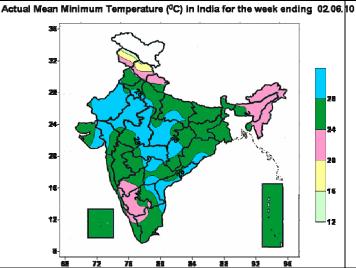
- **Realised Rainfall:** No significant rainfall occurred over the States during the period.
- **Rainfall Forecast:** Either isolated rain will occur or mainly dry / dry weather will prevail over the region.
- Major Crops:
 - Sugarcane (cane development) and vegetable crops (flowering / fruiting) in Madhya Pradesh.
 - *Boro* rice (maturity / early harvesting), summer rice, sunflower and groundnut (harvesting), sesame (seed formation / early maturity) in Chhattisgarh.
 - Advisory:
 - As conditions are favourable for normal arrival of monsoon, farmers in Madhya Pradesh and Chhattisgarh are advised to arrange for inputs to undertake sowing of *kharif* crops. Farmers in Jhabua Hills zone in Madhya Pradesh are advised to undertake nursery sowing of *kharif* vegetable crops like onion, chilli, tomato and brinjal for transplanting during monsoon.
 - As dry weather conditions prevail for the last few weeks and there are chances of no rainfall in the next three days over Madhya Pradesh, farmers are advised to apply light and frequent irrigation to sugarcane to meet the excess evaporative demands.
 - > Due to higher temperature, wind speed, low humidity as well as higher bright sunshine hours over Chhattisgarh evaporation rates are higher, which has increased the water requirements of summer vegetables crops. Hence, it is advised to reduce the interval between two irrigations and irrigate the crops as per requirement for proper water management in these crops.
 - > Due to forecast of high wind speed over Chhattisgarh, farmers are advised to undertake propping of sugarcane to prevent from lodging.

Annexure I Contour maps for the week ending 02.06.10

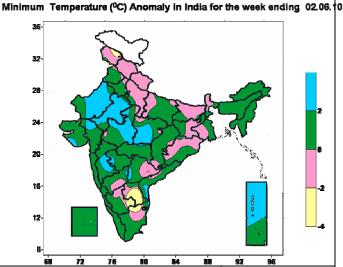


Actual Mean Maximum temperature ranged between 44°C and above over most parts of Vidarbha and Telengana, some parts of East Rajasthan, Madhya Pradesh, Chattisgarh, Marathwada and coastal Andhra Pradesh, 40 to 44°C over most parts of Northwest India (except Jammu & Kashmir, Himachal Pradesh, Uttarakhand, northern part of Uttar Pradesh), Central India, Gujarat, Saurashtra & Kutch, Marathwada, Madhya Maharashtra, South coastal Andhra Pradesh, Rayalaseema, some parts of Bihar, Jharkhand, Orissa, North Interior Karnataka and Tamil Nadu, 28 to 40°C over remaining parts of the country.

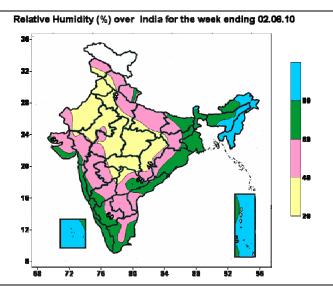
Actual Mean Maximum temperature anomaly ranged between 4°C and above over most parts of Telengana, some parts of East Madhya Pradesh, Chhattisgarh, Kutch, Vidarbha, Marathwada, North Interior Karnataka, Rayalaseema, Coastal Andhra Pradesh and Tamil Nadu, 2 to 4°C over most parts of Central India, South India except Andaman & Nicobar Islands, most parts of Sub-Himalayan West Bengal, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra, Marathwada, some parts of Jammu & Kashmir, Himachal Pradesh, Rajasthan, Bihar, Orissa, Gujarat, -2 to 2°C over remaining parts of the country.



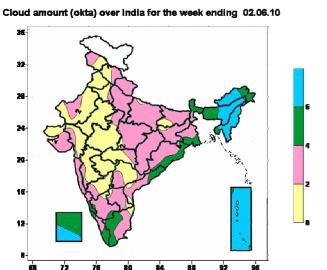
Actual Mean Minimum Temperature ranged between 28°C and above over most parts of Rajasthan, Central India, Gujarat, Coastal Andhra Pradesh, some parts of Punjab, Haryana, Uttar Pradesh, Saurashtra & Kutch, Chhattisgarh, Orissa, Marathwada, Telengana, Rayalaseema, Tamil Nadu, 24 to 28°C over most parts of the Country (except most part of North East India, Rajasthan, Central India, Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Gujarat, Karnataka) 12 to 24°C over remaining parts of the country.



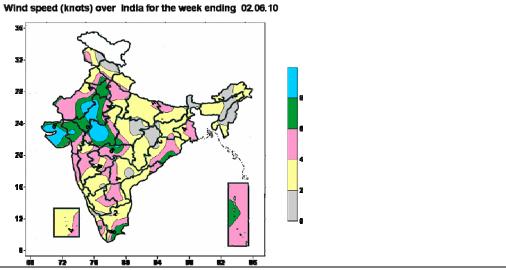
Minimum Temperature anomaly ranged 2°C and above over most parts of Rajasthan, Madhya Pradesh, Andaman & Nicobar Island, some parts of Gujarat, Kutch, Madhya Maharashtra, Marathwada, Telengana, Coastal Andhra Pradesh, 0 to 2°C over most parts of the country (except Jammu & Kashmir, Himachal Pradesh, Uttarakhand, West Uttar Pradesh, Rajasthan, most part of East India, Madhya Pradesh, Telengana, Rayalaseema, Andaman & Nicobar Islands), -4 to 0°C over remaining parts of the country.



Relative humidity between 80% and above over most parts of North East India, Andaman & Nicobar and Lakshdweep Island, some parts of Sikkim, 60 to 80% over most parts of Bihar, West Bengal, Sikkim, Assam, Orissa, Konkan & Goa, North Coastal Andhra Pradesh, Coastal Karnataka, South Interior Karnataka, Kerala and Tamil Nadu, some parts Uttarakhand, Jharkhand, Arunachal Pradesh, Kutch, Madhya Maharashtra, Telengana, North Interior Karnatka, Lakshdweep, Andaman & Nicobar Islands, 20 to 60% over remaining parts of the country.



Cloud amount 6 okta and above over most parts of Northeast India, Andaman & Nicobar Islands, some parts of Lakshdweep Islands, 4 to 6 okta over most parts Sikkim, Coastal Orissa, Kerala and Lakshdweep Islands, some parts of West Bengal, Arunachal Pradesh, Assam & Meghalaya, Tripura, Coastal Andhra Pradesh, Coastal Karnataka, South Interior Karnataka and Tamil Nadu, 0 to 4 okta over remaining parts of the country.



Wind speed ranged between 8 knots and above over most parts of Saurashtra, Kutch, some parts of Rajasthan, Gujarat, West Madhya Pradesh, 6 to 8 knots over most parts of Haryana, East Rajasthan, Gujarat, some parts of Punjab, West Rajasthan, Saurashtra & Kutch, Madhya Pradesh, Vidarbha, Orissa, Kerala, Tamil Nadu, Andaman & Nicobar Islands, 0 to 6 knots over remaining parts of the country.