

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

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

## Thursday, 30<sup>th</sup> November, 2006

(For the period 30<sup>th</sup> November to 4<sup>th</sup> December, 2006)
The extended version of the bulletin is also available at <a href="http://imdagrimet.org">http://imdagrimet.org</a>

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

#### Punjab

Weather remained manly dry in the State during the period.

Mainly dry weather is likely over the State.

#### **Advisories**

- As there was no significant rainfall during last week and weather is likely to be mainly dry over the State for next three days, apply irrigation to bring the soil moisture to its field capacity in sugarcane, gram, lentil and wheat.
- Continue sowing of *rabi* oil seeds. Start sowing of late varieties of wheat i.e. PBW 396, PBW 299, PBW 175, 373, 138 and TL 1210.
- Make necessary arrangements to protect the *rabi* oilseed, gram, lentil, wheat and vegetable crops from cold injury. Apply light irrigation and arrange for smoke around the field to prevent frost injury.

#### Haryana

Weather was mainly dry in the State during the period.

Mainly dry weather is likely over the State.

#### **Advisories**

- As there was no significant rainfall during last week and weather is likely to be mainly dry over the State for next three days, apply irrigation to bring the soil moisture to its field capacity in sugarcane, gram, lentil and wheat.
- Continue sowing of gram, lentil and *rabi* oil seeds. Start sowing of late varieties of wheat i.e. Sonalika, WH-291, 396, PBW 373,138 and RAJ-3765.
- Incidence of shoot borer, top borer, gurdaspur borer, pyrilla, termite and red rot is reported in sugarcane. To control pyrilla spray 600-800ml malathion in 800 lit of water per acre.

#### Rajasthan

Weather remained dry in the State.

Mainly dry weather is likely over the State.

- Complete harvesting matured crop of cotton.
- This is proper time for sowing of barley, mustard, gram, cumin and wheat. Continue land preparation and sowing. Undertake seed treatment before sowing.

- Apply pre sowing irrigation before sowing of wheat. Select among GW-173,190, PBW-343, HD-2329, Raj-1482, 3077, 3765 etc., for sowing.
- Late sowing of gram may be continued with Pusa-208, RSG-44, C-235 etc.

#### **Uttar Pradesh**

Cold wave conditions prevailing in some parts of U.P. and weather was mainly dry in all divisions of U.P on 27<sup>th</sup> & 28<sup>th</sup> November. Weather was mainly dry in all divisions of U.P. on 29<sup>th</sup> November.

Mainly dry weather is likely over the State.

#### Advisories

- There was no significant rainfall during last week and mainly dry weather is likely over the State for next three days. Under the circumstances, apply irrigation to bring the soil moisture to its field capacity in *rabi* oilseeds, pulses and winter vegetable crops.
- Continue weeding and hoeing along with top dressing of nitrogen in winter vegetables, and *rabi* oilseeds.
- Sowing of *rabi* wheat, and barley crops may be completed.
- Harvesting of sugarcane and *kharif* vegetables may be continued.
- As there is chance of occurrence of frost, farmers are advised to arrange for smoking around the field to save the crops from frost injury.

#### **Himachal Pradesh**

The sky was partly cloudy during the period.

Mainly dry weather is likely over the State. Subsequently snow fall activity may commence over the State from 3<sup>rd</sup> November.

#### Advisories

- As there was no significant rain during last week in most of the districts of the State, apply irrigation to vegetable crops, gram and early sown wheat and barley wherever crops are at vegetative stage.
- Continue land preparation and sowing of methi and palak in the low and mid hills and nursery sowing and transplanting of cauliflower and cabbage in low and mid hills and sowing of wheat, barley, radish, turnip and carrot.
- Select varieties from HPW-42 and HS-295 for late sowing of wheat, and Vimal (HBL-113) Dolma; Sonu (HBL-87); Gopi (HBL-316); Harit HBL-276) for barley.
- As there is chance of occurrence of frost, farmers are advised to arrange for smoking around the field to save the crops from frost injury.

#### Uttaranchal

Light rain was recorded at a few places on 23<sup>rd</sup> November. Weather remained mainly dry during rest of the period. Sky remained mainly clear to generally cloudy during the week.

Mainly dry weather is likely over the State.

- There was no significant rainfall during last week and mainly dry weather is likely over the State. Under the circumstances, apply irrigation to pea, *toria*, potato and sugarcane to bring the soil moisture to its field capacity.
- Carry out inter cultural operation, application of fertilizer and plant protection measures to mango, toria, and potato crops.
- Continue sowing of wheat.
- Apply light irrigation and arrange for smoke around the field to prevent the crops from frost injury.

#### Jammu & Kashmir

Weather remained mainly dry over J & K State.

Mainly dry weather is likely over the State during next 48 hours. Subsequently snow fall activity may commence over the State form 3<sup>rd</sup> November.

#### **Advisories**

- Apply irrigation and arrange for smoke near the field in Jammu & Kashmir divisions to safeguard the crops from cold/frost injury.
- Continue sowing of methi, coriander and spinach in Kashmir division. Continue nursery sowing for onion.
- Continue sowing of brown sarson (Kashmir division), gram (Jammu division), mustard, pea, lentil, toria and
  wheat to utilize residual moisture. Before sowing, undertake ploughing followed by planking to conserve
  moisture.
- Prevailing weather conditions in Jammu division may be favourable for the infestation of stem fly in pea crop. Monitor the crop and if damage exceeds ETL, spray the crop with Furadon 3G @ 20 kg per hectare.

#### Delhi

Weather remained dry.

Mainly dry weather is likely over the State.

#### **Advisories**

- As there was no significant rainfall during last few weeks and mainly dry weather is likely over the State for next
  three days, apply irrigation to early sown vegetable crops, wheat, barley, gram and also to mustard and toria to
  bring the soil moisture to its field capacity.
- Prepare land and continue transplanting of 4 6 weeks old varieties of cauliflower, cabbage and knolkhol plants.
- Prepare land and perform sowing of Japanese White, Reshmi and Pusa Himani varieties of raddish, Pusa kanchan, Golden Ball and Pusa Chandrama varieties of turnip and Bonabilla variety of peas and nursery sowing of N53 and Pusa Red varieties of onion. Treat the seeds with Captan or Thairam or Dithane M- 45 @ 2 g / kg seeds.
- Prepare land and continue sowing of wheat and gram.
- Select varieties from HD-2285, Raj-3077 or 3765, UP 2338 and PBW-226 or 373 etc. for late sown wheat and Pusa 362, Pusa 372 and Pusa 1003 (*Kabuli*) etc. for gram for sowing.

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

#### Kerala

Rain / thundershowers occurred at isolated places during the period.

Rain/thunder showers are likely at isolated places over the State.

- Rain/thundershowers are likely to occur at isolated places for the next three days. Under the circumstance, apply irrigation to the plantation crops and *mundakan* rice.
- Attack of leaf folder, brown plant hopper, stem borer, gall midge, sheath blight and bacterial leaf blight is reported in *mundakkan* rice. Spray 0.05% Monocrotophos or Quinalphos to control insect pests and 2% *Pseudomonas flourescns* culture @ 1 kg / ha to control the disease.

- Attack of root grub and mahali disease is reported in arecanut. Apply Phorate @ 10 g / tree to control root grub. Spray 1% Bordeaux mixture on fruit bunches and crown to control mahali disease.
- Attack of pollu beetle and quick wilt is reported in pepper. Avoid spraying as the crop is now at harvesting stage.

#### **Tamilnadu**

Rain / thunder showers are likely at isolated places over the State.

#### Advisories

- There was no significant rainfall occurred during last week in the state except in Coimbatore, Kanyakumari, Thirunelveli and Tuticorin. Under the circumstances, apply irrigation to the standing crops to bring the soil moisture to its field capacity. Apply irrigation depending on the soil profile stored moisture in the above mentioned districts.
- Cloudy weather conditions are favourable for the outbreak of pests and diseases, particularly BPH and blast. Monitor the
  crop and undertake plant protection measures.
- Continue transplanting of *samba* rice.
- Continue land preparation and sowing of cotton, pulses and groundnut and sunflower.

#### Karnataka

Over coastal Karnataka, rainfall occurred at isolated places on 23<sup>rd</sup>, 24<sup>th</sup> & 25<sup>th</sup>, 28<sup>th</sup> and 29<sup>th</sup> and dry weather prevailed on 26<sup>th</sup> and 27<sup>th</sup> November. Over North Interior Karnataka, rainfall occurred at a few places on 25<sup>th</sup> and at isolated places on 28<sup>th</sup> and dry weather prevailed on the remaining days. Over South Interior Karnataka, rainfall occurred at isolated places on all days except 26<sup>th</sup> when the weather was mainly dry.

Mainly dry weather is likely over Karnataka.

#### Advisories

- There was no significant rainfall in all the districts except in Belgaum, Chichmagalur and Kodagu. Under the conditions, apply irrigation to early sown *rabi crops* like jowar, wheat and maize. Apply irrigation depending upon soil profile stored moisture in the above mentioned districts.
- Harvest the matured *kharif* crops like rice, groundnut, cotton and sugarcane on bright sunny days.
- Attack of army worm has been reported in sugarcane in Bidar and Bagalkote districts in north interior Karnataka subdivision. Avoid spraying as the crop is now at harvesting stage.

#### **Andhra Pradesh**

Dry weather prevailed over the state during period.

Mainly dry weather is likely to prevail over the state.

#### **Advisories**

- Conserve moisture in the field wherever the crops are at maturity stage.
- Incidences of pod borer have been reported in red gram. Spray Dichlorvas @ 2.5 ml/litre of water.
- Continue harvesting of matured rice, tur, cotton and maize on bright sunny days.

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

#### Assam

Weather was dry over the State during the period.

Mainly dry weather is likely over the State.

#### **Advisories**

- As Dibrugarh, Lakhimpur, Sibsagar and Tinsukia districts received excess rain during last week, postpone
  irrigation in these districts.
- As there was no significant rain during last week in remaining districts of the State and mainly dry weather is likely over the State for the next three days, apply irrigation to black gram, green gram, rapeseed and mustard and early sown potato, wheat, pea and lentil.
- Drain out standing water 10-15 days before harvesting of *Sali* rice.
- Mild incidence of Pod and apion borer in arhar, aphids, jassids, flea beetle and leaf spot in black gram and green gram, aphids and saw fly in mustard and late blight in tomato is reported.
- Monitor Pod and apion borer in arhar and if crosses economic threshold level, spray Malathion 50 EC @ 1.5 ml per litre of water or Fenitrothion 50 E.C. @ 2ml per litre of water.
- Monitor Aphids, Jassids, Flea beetles in black gram and green gram and if crosses economic threshold level, spray Malathion 50 EC @ 2ml per litre of water. For leaf spot, as soon as diseases appear, spray Blitox or Fitolan @ 1.5 gram per litre of water at an interval of 7 to 10 days. Alternatively Bavistin @ 1 gram per litre of water should be applied at an interval of 12 to 15 days.
- Monitor aphids and saw fly in mustard and if crosses economic threshold level, spray Rogor or malathion @ 2ml per litre of water.
- Monitor late blight of tomato and if crosses economic threshold level, spray Indofil M-45, alternatively Indofil Z-78 @ 25 gm in 10 litres of water.
- Continue land preparation and sowing of winter vegetables, potato, wheat, pea and lentil and preparation of rice nursery.

#### **West Bengal**

During the said period weather was mainly dry throughout the State.

Weather will be mainly dry over the state.

#### **Advisories**

- As there was no significant rainfall in most of the districts of the State during last week and mainly dry weather is likely over the State for next three days, apply irrigation to sugarcane, rapeseed and mustard and also to early sown gram, wheat and potato wherever crops are at vegetative stage.
- Continue harvesting of matured *aman* rice on bright sunny days.
- Land should be prepared and sowing of boro rice, wheat and planting of potato may be done.
- Select varieties from CR-126-42-1, Khitish, IE-2233, PNR 381, IR-36, Lalat, Annada, Aditya, Tulsi etc. for short duration and Shasyasri, Prakash, Kunti, Ajaya, Pratap, Suraksha etc. for medium duration *boro* rice and Sonalika, UP 262, HP 1209, 1633, K 8804, PW 11 etc. for wheat.

#### Bihar

Weather remained dry.

Mainly dry weather is likely over the State.

#### Advisories

• There was no rainfall during last week and mainly dry weather is likely over the State for next three days. Under the circumstances, apply required irrigation to bring the soil moisture to field capacity in vegetables, maize, pulses, oilseeds and wheat.

- Continue transplanting of cauliflower, chillies, brinjal from ready seedling and sowing of winter vegetables.
- Continue field preparation and sowing of wheat and potato with available residual moisture.
- Weeding/thinning and top dressing operation may be continued in *rabi* maize, pulses/oilseed and earlier sown vegetable crops.

#### **.Iharkhand**

Weather remained mainly dry.

Mainly dry weather is likely over the State.

#### **Advisories**

- There was no rainfall during last week and mainly dry weather is likely over the State for next three days. Under the circumstances, apply required irrigation to bring the soil moisture to field capacity in vegetables.
- Harvest the matured rice crop.
- Continue field preparation, sowing/transplanting of onion, tomato, cabbage, cauliflower, brinjal, chilli, potato, garlic and pea.
- Sowing of *rabi* pulses, oilseeds, maize, potato and wheat may be continued.

#### **Sikkim**

Very light rain occurred at a few places on 28<sup>th</sup> and 29<sup>th</sup> over East Sikkim. No rain occurred on 27<sup>th</sup> November over East Sikkim. Rainfall was scanty during the period.

Mainly dry weather is likely over the State

#### **Advisories**

- As there was excess rainfall during last week, postpone irrigation to vegetables.
- Continue harvesting of orange and rice.
- Continue sowing of wheat.
- Undertake intercultural operations in rabi vegetables and mustard to keep the field weed free.

#### **Arunachal Pradesh**

Mainly dry weather is likely over the State.

#### **Advisories**

- There was excess rainfall during last week and mainly dry weather is likely over the State for the next three days. Under these conditions, apply irrigation depending on the soil profile stored moisture to ginger, early sown potato and winter vegetables.
- Sowing of potato, wheat and mustard may be completed.
- First top dressing in early sown potato (33Kg Urea / ha) followed by earthing up and spray with 1.25 Kg Dithane M-45 in 500 lit water may be continued.

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

#### **Gujarat**

Weather remained mainly dry during last week.

Rain / thundershowers likely over south Gujarat and weather will be mainly dry over the remaining part of the State.

#### **Advisories**

- As there was no significant rain in the State during last few weeks and rain / thundershowers likely over south Gujarat and weather will be mainly dry over the remaining part of the State for next three days, apply irrigation to sugarcane, pre-monsoon irrigated cotton, *Kharif* cotton, castor and mustard to bring the soil moisture to field capacity.
- For monitoring & management of boll worm & 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.
- Prepare land and continue sowing of wheat crop. Select varieties from Lok-1, GW-496 (125-130 kg seeds / ha), GW-190 (100 kg seeds / ha), GW-503,273, 322 (125 kg seeds / ha), Raj-1555 (duram) (150 kg seeds / ha) for normal sowing and Lok-1, Gw-173 (150 kg seeds / ha) for late sowing of irrigated wheat and GW-1, A-206 (50 60 kg seeds / ha) for sowing of non-irrigated wheat. Apply basal fertilizer dose 60 kg Nitrogen, 60 kg phosphorus / ha for irrigated wheat and 20 kg Nitrogen for unirrigated wheat in furrow at the time of sowing.

#### Chhattisgarh

Weather remained dry during the period.

Mainly dry weather is likely over the State.

#### **Advisories**

- As there was excess rainfall in Raigarh district during last week, postpone irrigation to the crops in this district.
- As there was no significant rainfall in remaining districts during last week and mainly dry weather is likely over the State for next three days, apply irrigation to sugarcane and vegetables and also to early sown gram, linseed, safflower, mustard, *toria* wherever crops are at vegetative stage.
- Continue harvesting of matured rice crops on bright sunny days.
- Continue preparation of land and sowing of gram, linseed, safflower, mustard and *toria*, nursery sowing of onion and planting of potato.
- Seeds of gram may be treated with 2 to 2.5 gm Thiram / Captan / kg seeds & 250 gm Rhizobium + PSB / 10 kg seeds before sowing. Select varieties from Vaibhay, Vijay, J.G.- 74, I.P.C. 2 etc. for gram.

#### Maharashtra

Rain has occurred at isolated places in East Vidarbha on  $27^{th}$ , in South Konkan on  $28^{th}$  & in South Madhya Maharashtra, Marathwada on  $29^{th}$  November. Mainly dry weather prevailed over rest of the State.

Rain / thundershowers are likely at isolated places over Konkan & Goa, Madhya Maharashtra. Mainly dry weather is likely over Marathawada and Vidarbha.

- As there was no significant rain during last week in most of the districts and rain / thundershowers are likely at isolated places over Konkan and Goa, Madhya Maharashtra and mainly dry weather is likely over Marathawada and Vidarbha for next three days, apply irrigation to *kharif* cotton, tur and Cotton (irrigated) crops and also to early sown crops of *rabi* jowar, safflower, wheat, gram, *rabi* maize, sunflower, sugarcane (Pre-seasonal), potato and onion.
- Mild incidence of White Woolly Aphids in Aurangabad, Latur, Kohlapur and Pune and Pyrilla, White fly and
  Mealy bug in Nashik in sugarcane, Rice hispa & Midge fly in Nagpur division in Kharif rice, Aphids and
  Jassids in Aurangabad and Boll worm in Latur, Nashik and Amravati div. in irrigated cotton and Aphids and
  Jassids in Aurangabad and Vidarbha division in kharif cotton and leaf roller in Aurangabad, pod borer in Latur

division in tur and downy mildew in Grapes in Nasik, Pune, Solapur, Sangli and some other districts is reported.

- Monitor aphids and jassids population in cotton and if crosses economic threshold level, spray methyl dimeton 25EC @ 320 ml or dimethoate 30EC @ 500 ml / ha in 500 liter water.
- Monitor Boll worm in cotton and if exceeds economic threshold level, spray 36 % Monocrotophos WSC or 35 % Endosulphan WSC @ 850 ml / ha in 500 liter water.
- Monitor leaf roller population in *tur* and if crosses economic threshold level, spray 1000 ml endosulphon / ha in 500 liter water.
- Monitor pod borer population in *tur* and if crosses economic threshold level, spray 5% Neem extract or 20 to 25 ml Fenvalerate / ha in 100 liter water.
- For the control of downy mildew on Grapes, spray 0.2 to 0.4 % Bordeaux mixture @ 250 gm in 100 liter water at 10 days interval. For powdery mildew alternate spraying of Tridimefon @ 100 ml or water soluble Sulpher @ 200 gm in 100 liter may be done at 10 days interval.
- Continue field preparation and sowing of wheat and planting of sugarcane (Pre-seasonal) and onion.
- Select varieties like HI 977, HD 2501 and NIAW 34 for late sown wheat, CO-740, CO-7219, CO-86032, CO-M-88121 for sugarcane (Pre-seasonal) and N-2-4-1, Pusa red, Arka niketan (for *rabi* plantating), Fule suvarna (for export) & Agri white-1, Fule safed, N-257-9-1 varieties (for powder) for onion.

#### **Madhya Pradesh**

Rain occurred at southeast MP on 27<sup>th</sup> and southwest MP on 29<sup>th</sup> November. Mainly dry weather prevailed over the State during rest period.

Mainly dry weather is likely over the State.

#### **Advisories**

- Undertake intercultural operations like weeding in early sown *rabi* crops like gram, mustard etc. to keep the field weed free.
- Apply light irrigation to the early sown crops, particularly for irrigated wheat.
- Continue harvesting of matured crop of *tur*.

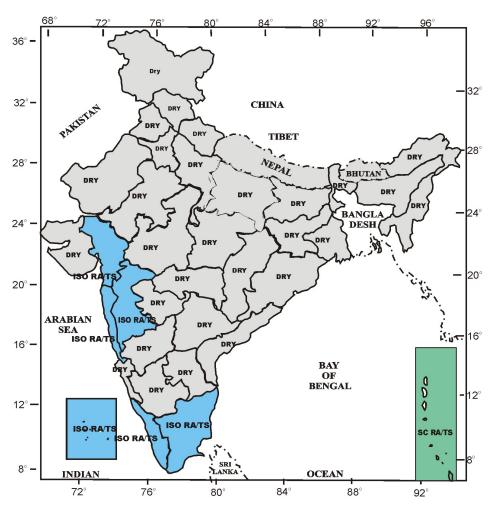
#### **Orissa**

Rainfall occurred at isolated places over North Orissa and weather has been dry over South Orissa on 27<sup>th</sup> November. Weather has been dry over Orissa on 28<sup>th</sup> and 29<sup>th</sup> November.

Mainly dry weather is likely over the State.

- There was no rainfall during last week and mainly dry weather is likely over the State for next 3 days. Under the circumstances, apply required irrigation to the standing crops to bring the soil moisture to field capacity.
- Also continue inter cultural operation, application of fertilizer and plant protection measures to the crops.
- Field preparation and sowing of *rabi* groundnut, mung, *kulthi*, field pea and mustard may be continued.
- Harvest the matured rice crop.

### Forecast Map Valid upto 4th December



ISO - Isolated, TS - Thunder shower/storm, SN - Snow, RA - Rain, DRY - No rain, SC - Scattered, MOD-Moderate, SQ - Squall, HA- Hail. DS - Dust Storm, FW - Fairly Widespread \* - With heavy Rain warning

### Salient weather features for the week ending 29/11/06

#### **METEOROLOGICAL ANALYSIS**

- Last week's western disturbance over Jammu & Kashmir and neighbourhood persisted on 23rd and moved away eastwards on 24th. Another feeble western disturbance moved across western Himalayan region on 26th and 27th.
- An upper air cyclonic circulation in the lower troposphere levels was seen over northeastern states during the first half of the week.
- An upper air cyclonic circulation extending upto 2.1 km a.s.l. was seen over north Madhya Maharashtra & neighbourhood during the later half of the week.
- A low pressure area formed over southeast and adjoining southwest Arabian sea on 23rd. It persisted on 24th and weakened thereafter.
- Trough of low pressure one over southwest Bay of Bengal and another over East Arabian sea were seen on many days of the week.

#### RAINFALL

Under the influence of the above systems:

- Light to moderate snowfall occurred at a few places over Jammu & Kashmir, Himachal Pradesh and Uttaranchal on 23rd. Light rain/thundershowers also occurred over the adjoining plains of Punjab, Haryana, Delhi and West Uttar Pradesh on 23rd.
- Scattered rainfall activity occurred over Arunachal Pradesh and Assam & Meghalaya during 23rd to 26th.
- Light to moderate rain/thundershowers occurred over Konkan & Goa, Madhya Maharashtra on many days of the week and over Marathawada and southwest Madhya Pradesh on one or two days of the week.
- Rain/thundershowers also occurred over many places over Tamil Nadu and Kerala on 23rd, 24th, 27th and 28th and at a few places/isolated places on remaining days of the week.
- Light rain/thundershowers also occurred over Coastal Karnataka, Lakshadweep and Andaman & Nicobar islands on some days of the week.
- Weather remained mainly dry over the rest of the country during the week.

#### **TEMPERATURES**

- Night temperatures were 4-6°C above normal over many parts of northwest India during first 2 days of the week. Subsequently, they fell over northwest India and Gangetic plains and were 2-4°C below normal during rest of the week. In fact, cold wave conditions also developed over some parts of East Uttar Pradesh and isolated pockets of Punjab and Haryana on 28th.
- They remained above normal over remaining parts of the country particularly over central India and adjoining Maharashtra where they were above normal by 4-6° C on many days of the week.

#### RAINFALL DURING THE WEEK ENDING ON 29<sup>TH</sup> NOVEMBER, 2006

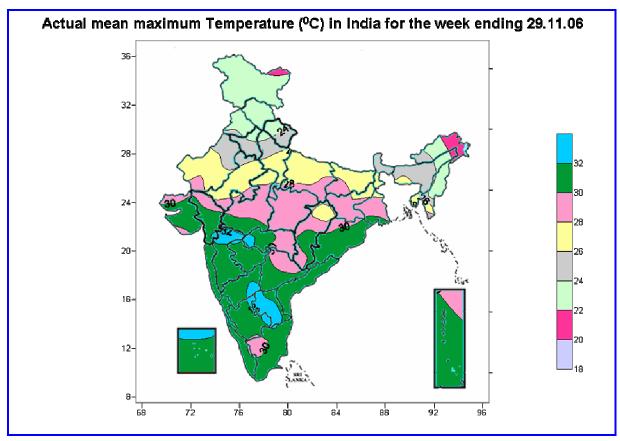
Rainfall was excess/normal in 09 and deficient/scanty in 19 and no rain in 08 out of 36 meteorological sub-divisions (Actual: 4.5 mm, Normal: 5.4 mm and Departure: -16%).

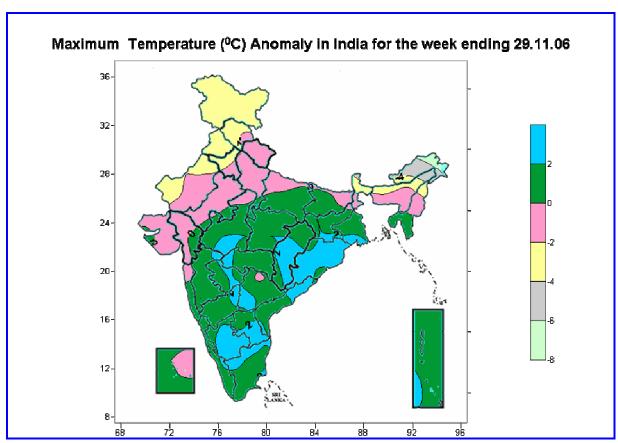
#### CUMULATIVE SEASONAL RAINFALL (1<sup>ST</sup> OCTOBER TO 29<sup>TH</sup> NOVEMBER, 2006)

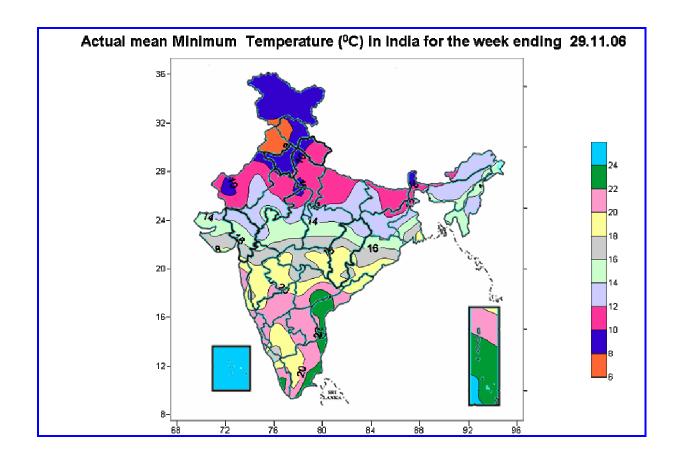
Rainfall was excess/normal in 15 and deficient/scanty in 21 out of 36 meteorological sub-divisions. (Actual: 89.7 mm, Normal: 107.4 mm and Departure: -16%).

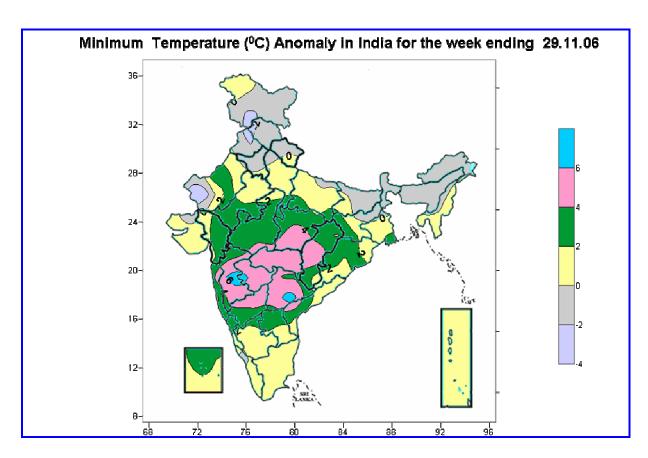
#### OUTLOOK FOR THE WEEK ENDING ON 6<sup>TH</sup> DECEMBER, 2006.

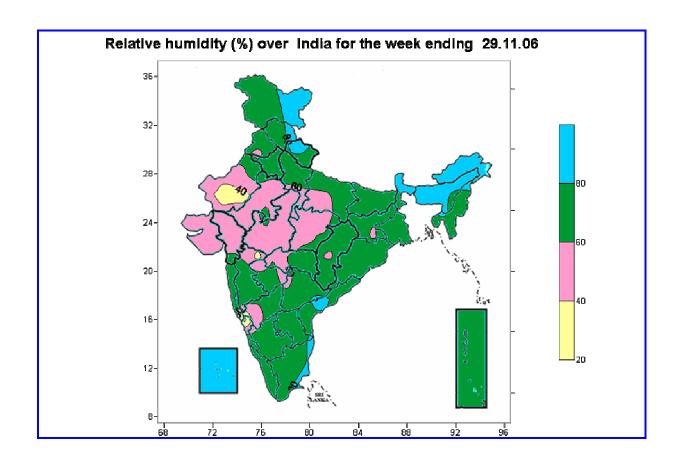
- In view of an approaching western disturbance, northwest India is likely to experience a wet spell during 3rd to 6th December. Isolated heavy snowfall is also likely over western Himalayan region during the above period. Night temperatures are likely to increase over northwest India.
- Subdued rainfall activity is likely to continue over extreme south peninsula.
- Isolated rain/thundershowers is also likely over Konkan & Goa, Madhya Maharashtra and Madhya Pradesh during first two days of the week.

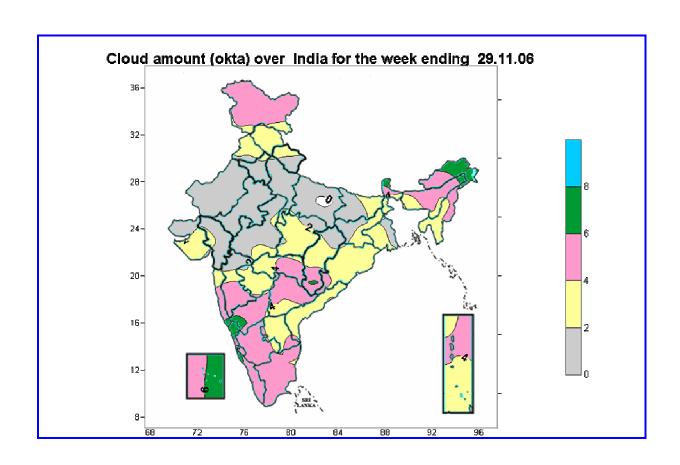


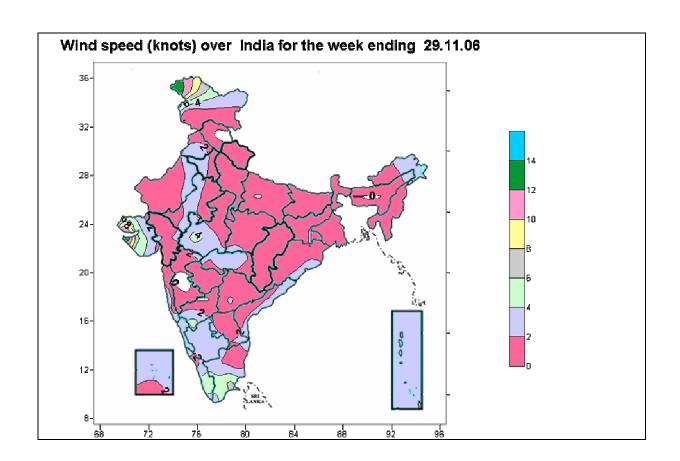












## **Desert Locust Forecasting**



Rainfall (mm)									
Station Name	23.11.06	24.11.06	25.11.06	26.11.06	27.11.06	28.11.06	29.11.06		
Amritsar			•		•				
Barmer									
Sriganganagar									
Jaisalmer		NIL							
Kota									
Deesa									
Churu									

Temperature (degree celcius)									
Station Name	23.11.06	24.11.06	25.11.06	26.11.06	27.11.06	28.11.06	29.11.06		
Amritsar	15.5	-	15	14	15	11.5	14		
Barmer	21.5	19.5	18.5	16.5	16	17.5	18		
Sriganganagar	18	17	16	15.5	16.5	15	16.5		
Jaisalmer	21	20	20	19	19.5	20	20.5		
Kota	26.5	23.5	21	19	19	19.5	21.5		
Deesa	25	24	22.5	-	21	21.5	22		
Churu	-	-	-	-	-	-	-		

Wind														
Station	23.1	1.06	24.1	1.06	25.1	11.06	26.1	1.06	27.1	1.06	28.1	1.06	29.	11.06
Name	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.
Amritsar	-	-	06	NW	-	-	-	-	06	NNW	04	Е	-	-
Barmer	08	W	06	WNW	-	-	-	-	08	NW	03	N	03	N
Sriganga nagar	-	-	10	NNW	-	-	-	-	13	WNW	01	NNW	15	WNW
Jaisalmer	-	-	05	NW	-	-	-	-	09	WNW	03	W	09	W
Kota	-	-	06	W	-	-	-	-	09	WNW	04	WNW	06	S
Deesa	07	W	07	WNW	-	-	-	-	02	W	-	-	12	WNW
Churu	-	-	10	NNW	-	-	-	-	17	NW	02	ENE	06	WNW

There is no chance of locust infestation in Rajasthan and the adjoining areas during this week.

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

	CRO	P – STATE – STAG	E		
		D.III:			
Toria	Vegetables (Brinjal, Chilly, Cauliflower and cabbage, raddish, carrot,and turnip	Delhi  Early sown vegetable crops	Wheat	Gram	
Vegetative / flowering	Sowing/ Transplanting	Vegetative/ flowering/ fruiting/ harvesting	Sowing	Sowing	
Barley	Mustard	Early sown Wheat	Early sown Gram		
Germination / early vegetative	Vegetative	Germination / crown root initiation	Germination / early vegetative		
		Haryana			
Horticultural crop	Sugarcane	Gram /Lentil	Rabi oilseeds	Wheat	
Sowing/plantation	Vegetative	Sowing/early vegetative	Sowing	Sowing/early vegetative	
		Himachal Pradesh			
Wheat	Gram	Summer vegetables (Cauliflower, Cabbage) /Arcle peas	Vegetables (Tomato, brinjal, ladies finger)	Barley	
Land preparation/sowing	Germination/early vegetative	Transplanting in high hills /Nursery sowing	Vegetative/flowering / fruiting / harvesting	Land preparation/sowing	
Early sown Wheat	Vegetables (Methi, Palak)	Early sown Barley	Summer vegetables Radish, Turnip, Carrot		
Germination/Early vegetative/Crown root initiation	Sowing	Germination/ Early vegetative	Sowing		
		Jammu & Kashmir			
Winter vegetable crops	Rice	Mustard	Gram/ Field Pea	Wheat	
Sowing/Transplanting	End harvesting	Vegetative/flowering	Early vegetative/vegetative	Sowing	
Pea & brown sarson	Barley	Toria	Gobi Sarson	Lentil	
Early vegetative	Sowing	Early vegetative	Sowing	Sowing	
C	D 1 ' ' '	Punjab	TT 4' 14 1	¥¥7° 4	
Sugarcane	Rabi oilseeds	Gram/Lentil	Horticultural crop	Wheat	
Vegetative	Germination	Sowing / early vegetative	Sowing/plantation	Sowing / early vegetative	
		Rajasthan			
Cotton	Mustard	Wheat & cumin	Gram	Barley	
End picking	Land preparation / sowing	Land preparation/sowing	Land preparation/sowing	Land preparation/sowing	
Early sown Barley	Early sown Mustard				
Early vegetative/vegetative	Early vegetative				

			Uttar Pra	desh			
Wheat/Barley			Early sown Wheat/Barle		Winter Vegetables		
Sowing	Ea	rly vegetative	Cane maturity / harvesting		seedling		Vegetative
Mango		Oilseeds(toria, and mustard)	Kharif Vegetables				
Active growth		Vegetative		resting			
			Uttaranc		_		
Pea Flowering/pod	N	lango/Litchi		heat n/crown root	Sugarcane Grand		Toria Flowering/pod
formation  Potato	A	ctive growth		iation	growth/Matur	ity	formation
Tuber growth							
			Assan	1			
Early sown Vegetables		Sugarcane	WI	heat	Vegetables		Balck gram and Green gram
Vegetative	Ca	nne maturity / harvesting	Land prepar	ration/sowing	Land preparation sowing		Pod formation/ maturity
Sali rice		Arhar	Rape seed a	and Mustard	Early sown Po Lentil and Pot		Pea, Lentil and Potato
Maturity/harvesting		Maturity	Vege	etative	Early vegetati	ve	Land preparation/sowing
Early sown Wheat		Boro Rice					
early vegetative / crown root initiation stage	Prej	paration of rice nursery					
root initiation stage		nursery	Arunachal P	Pradesh			
Mustard	Ginger		Potato		Wheat		Winter vegetables
Land preparation / sowing		Vegetative	Land prepara	ation / sowing	Land preparation / sowing		Vegetative
Early sown Potato							
Early vegetative							
T 4 177 411	****		Bihar		T 1 177		D 1134 1
Fruits and Vegetables	Winter vegetables		WI	heat	Early sown Wl		Rabi Maize
Vegetative	Sowir	ng / transplanting	sowing		vegetative		Early vegetative
Potato		Oil seeds (Toria, rson, Linseed)	Rabi Pulses (Lentil, Gram, Pea)		Early sown Pulses (Lenti Gram, Pea)	il,	
Field preparation / sowing	Ea	rly vegetative	Early vegetative		Early vegetati		
<i>-</i>			Jharkha	ınd			
Rice		Rabi Ma	aize	W	heat		Potato
Maturity/harvesting		Field preparation	on, sowing	Field prepa	ration, sowing	Field	preparation /sowing
Rabi vegetables (Toma Cabbage, Cauliflowe Brinjal, Chilli)		Early planted	vegetables	Rabi pulse	s and oilseeds		
Transplanting, Onion-Sov	wing	Early vegetative	/ vegetative Sikkin		ration /sowing		
Orange / Rice		Mustard		egetables	Early sown Wl	neat	Wheat
Harvesting	Early vegetative/vegetative		Early vegetative/vegetative		Early vegetative/vegetative		Sowing
			West Ber			1	Rape seed and
Boro rice	Sugarcane		Wheat		Aman rice		Mustatrd
Field preparation / sowing		e development	Field preparation / sowing  Potato		Harvesting		Early vegetative / Vegetative
Gram/ Lentil		nination / early			Early sowing Po		
Germination / early vegetative		tive / crown root initiation		paration and nting	Sprouting / ear vegetative	rly	
	<u> </u>		Chhattisg	garh	1		
Gram		tables (Tomato, nilli, brinjal)	•	arcane	Kharif rice		Linseed, Safflower Mustard, Toria
Field preparation/sowing		Vegetative	Cane development		Harvesting		Field preparation/sowing

Early Sown Gram	Early Sown Linseed, Safflower, Mustard, Toria	Potato	Onion	
Early vegetative	Early vegetative	Field preparation/Planting	Field preparation and nursery sowing	
		Gujarat	narsery sewing	
Mustard	Wheat	Pre-monsoon irrigated Cotton	Castor	Sugarcane
Vegetative	Land preparation/sowing	Boll formation / picking	Flowering/ Pod formation	Cane development/early maturity
Kharif Cotton	Early Sown Wheat	Summer Rice		
Square / boll formation	Germination / early vegetative	Preparation of rice		
	vegetative	nursery Maharashtra		
Rabi Jowar (Madhya Maharashtra, Marathwada & Vidarbha)	Tur (Madhya Maharashtra, Marathwada & Vidarbha)	Irrigated Cotton	Sugarcane (Seasonal) (Madhya Mahrashtra, Marthwada and Vidarbha)	Rabi Sunflower (Madhya Maharashtra, Marathwada & Vidarbha)
Early vegetative /	Pod formation/pod	Boll formation /boll	cane	early
vegetative	maturity	maturity/picking	maturity/harvesting	vegetative/vegetative
Potato (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Early sown Sugarcane Preseasonal and potato (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif rice (Konkan)	Kharif rice (Madhya Maharashtra, Marathwada & Vidarbha)
Field preparation/planting	Boll formation/ boll maturity/picking	Sprouting/Early vegetative/early tuberization	(medium varieties)  Harvesting (late varieties)  Grain  maturity/harvesting	Grain maturity/harvesting
Gram,Maize (Madhya Maharashtra, Marathwada & Vidarbha)	Wheat (Madhya Maharashtra, Marathwada & Vidarbha)	Onion & Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Early sown Gram (Madhya Maharashtra, Marathwada & Vidarbha)	Early sown Wheat (Madhya Maharashtra, Marathwada & Vidarbha)
Germination / early vegetative/branching	Field preparation / sowing/	Field preparation/planting	Germination	Germination/seedling, crown root initiation/tillering
		Madhya Pradesh	T.	1
Wheat & gram	Mustard	Kharif crops(Tur/)	Masoor	Linseed
Germination/seedling/early vegetative/vegetative	Germination/seedling/early vegetative/vegetative	Pod harvesting	Germination/seedlin g/early vegetative/vegetative	Germination / seedling / early vegetative / vegetative
		Orissa		1
Vegetables	Kharif Rice	Mustard Seedling/early	Pulses Sowing (Biri / Mung	Early sown pulses
vegetative	Maturity/harvesting	vegetative	/ Kulthi)	Pod maturity
Sugarcane	Rabi Groundnut			
Grand growth	Seedling/early vegetative			
	T71 10 /01 104 /	Andhra Pradesh	T	
Kharif rice	Kharif crops(Chillies/ Tur)	Groundnut	Cotton	
Grain harvesting	Tur-Pod harvesting,	Pod harvesting Karnataka	Boll picking	
	Sugarcane (Ratoon	Early sownRabi		
Groundnut	crop & new crop)	jowar, wheat and maize	Kharif rice	Kharif cotton
End harvesting	Harvesting	seedling/early	Grain harvesting	Picking

		Kerala		
Rubber	Mundakan rice	Pepper		
Tapping	Grain formation	Harvesting		
		Tamil Nadu		
Early sown Pulses (Black gram and green gram)	Millets	Cotton	Early & mid sugarcane	Early sown oilseeds
Vegetative	Sowing	Sowing	Maturity	Vegetative
Early sown Millets	Rice (Samba)	Pulses (Blach gram and Green gram)	Oilseeds (Groundnut, Sunflower)	
Vegetative	Nursery/transplanting	Sowing	Sowing	