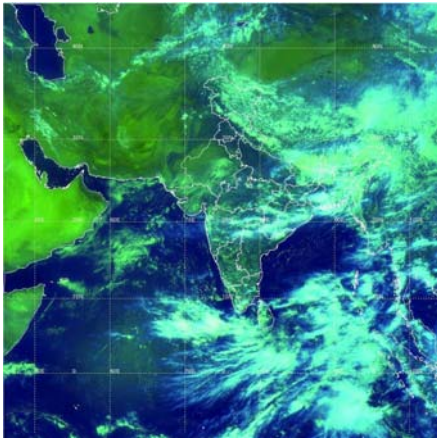




National Agromet Advisory Bulletin

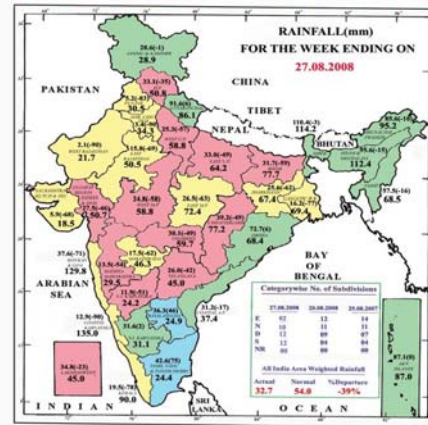
राष्ट्रीय कृषि मौसम परामर्श बुलेटिन

Thursday, 28th August, 2008
(For the period 28th August to 1st September, 2008)



29th August 2008, 8 UTC

भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



The banks of the Kosi river overflowed days after the part of the river in neighbouring Nepal breached an embankment there. Supaul, Araria and Madhepura districts bordering Nepal are the worst affected. According to reports, crops on tens of thousands of hectares of land have been damaged by the floods.



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

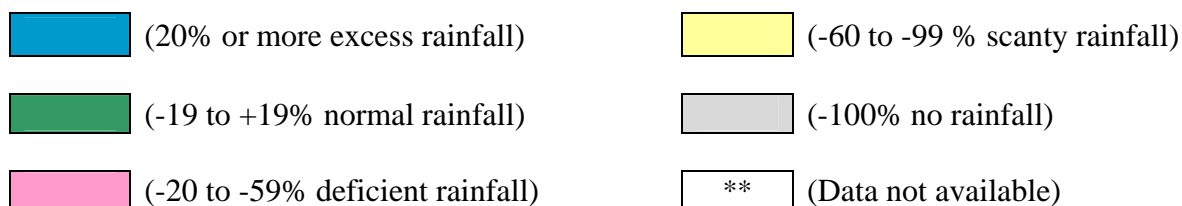
राष्ट्रीय कृषि मौसम विज्ञान परामर्श सेवा केन्द्र
कृषि मौसम विज्ञान प्रभाग, भारत मौसम
द्वारा जारी

The bulletin is also displayed in the website (<http://imdagrmet.org>) of the Division

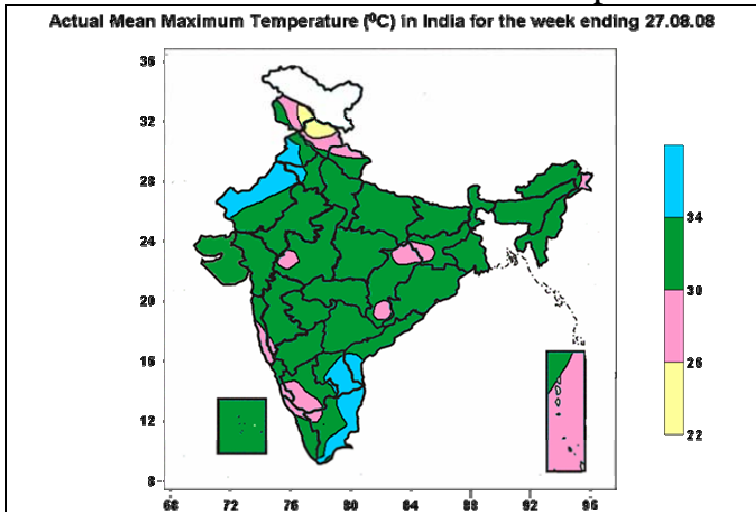
Comparison of weekly rainfall distribution (in % dep.) in different Met. Sub-divisions during past 5 weeks

Sub-division	Cumulative Rainfall (% Dep.) for the period										
	30 th July	6 th Aug.	13 th Aug.	20 th Aug.	27 th Aug.	Sub-division	30 th July	6 th Aug.	13 th Aug.	20 th Aug.	27 th Aug.
A & N Islands	6	104	26	-55	0	West M. P.	-10	-7	8	-78	-58
Arunachal Pradesh	-6	14	25	20	-10	East M. P.	11	4	3	-50	-63
Assam and Meghalaya	-28	-19	0	15	-15	Gujarat region	-32	56	172	-32	-46
NNMT	-29	62	-7	-23	-16	Saurashtra & Kutch	-21	35	24	-49	-68
SH West Bengal & Sikkim	10	14	-3	73	-3	Konkan and Goa	-11	8	182	-25	-71
Gangetic West Bengal	40	-62	13	21	-77	Madhya Maharashtra	-38	-4	179	-40	-54
Orissa	20	-19	64	9	6	Marathwada	-48	-3	0	-79	-62
Jharkhand	17	-73	18	49	-62	Vidarbha	-17	60	-5	-74	-49
Bihar	35	-74	19	101	-59	Chhattisgarh	-7	-16	3	-4	-49
East Uttar Pradesh	57	-78	-10	90	-49	Coastal A. P.	-5	99	146	47	-17
West Uttar Pradesh	56	-27	-48	59	-57	Telangana	-20	125	189	-11	-42
Uttaranchal	28	-2	-14	19	06	Rayalseema	-13	-17	7	0	46
Haryana, Chandigarh and Delhi	26	37	38	9	-19	TamilNadu & Pondicherry	9	-37	-29	148	75
Punjab	30	53	73	92	-83	Coastal Karnataka	-29	-35	141	-9	-90
Himachal Pradesh	-6	-13	-26	48	-35	N. I. Karnataka	-39	6	142	-63	-51
J & K	15	55	-14	21	-1	S. I. Karnataka	-10	-14	188	-2	2
West Rajasthan	-6	314	23	3	-19	Kerala	-33	-40	61	-57	-78
East Rajasthan	12	43	-9	-55	-69	Lakshadweep	2	-78	-45	4	-23

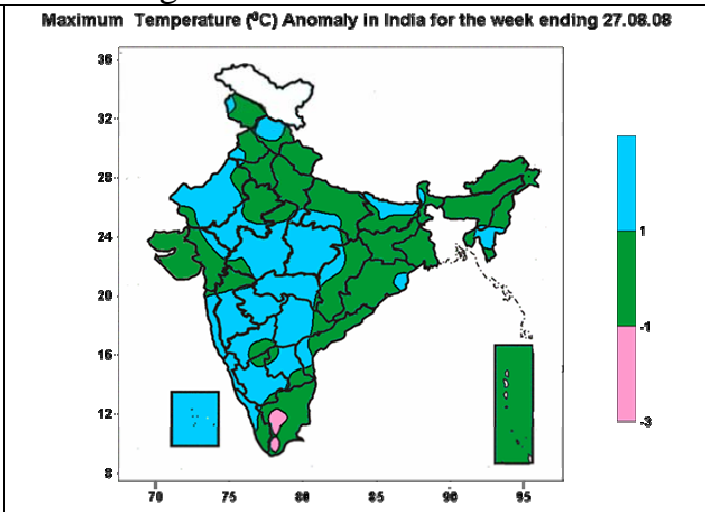
The sub divisions like West Uttar Pradesh, Gujarat region, Saurashtra & Kutch, Madhya Maharashtra, Marathwada, Coastal Karnataka, N. I. Karnataka Kerala and Lakshadweep received scanty / deficient rain in at least 3 out of last 5 weeks. Other subdivisions received almost normal distribution of rain during this period.



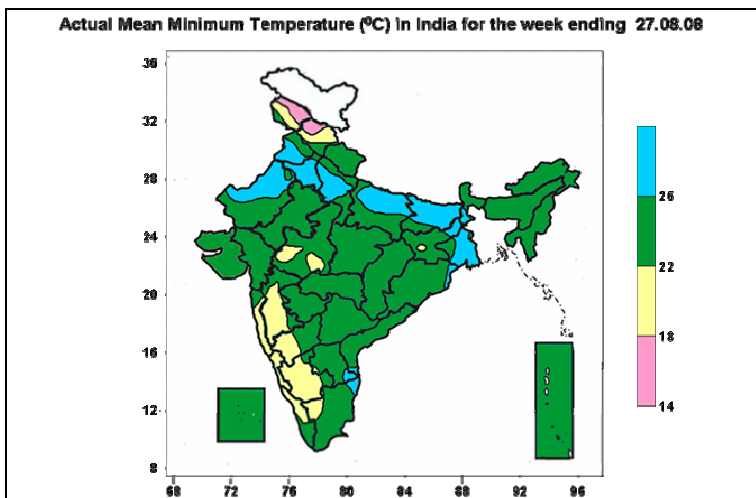
Contour maps for the week ending 27.8.08



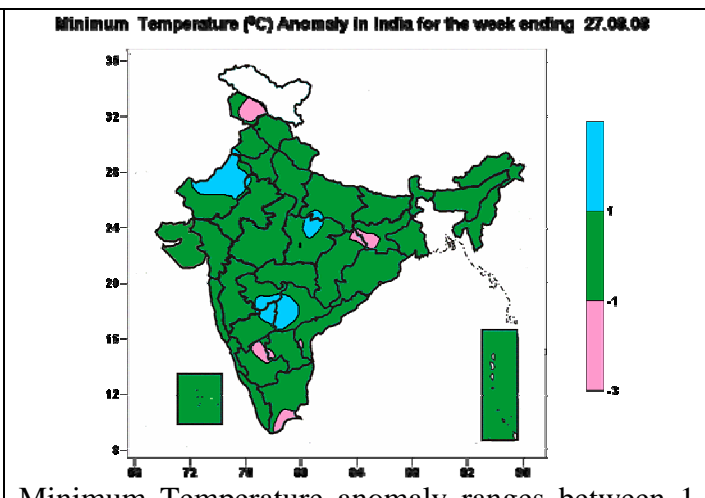
Actual Mean Maximum Temperature ranges between 34 to 38⁰C over little part of Haryana, Coastal Andhra Pradesh and some part Punjab, West Rajasthan, Coastal Andhra Pradesh and Tamil Nadu and most part over Rayalaseema and 30 to 34⁰C over most part of the country. 26 to 30⁰C in little part of West Madhya Pradesh, Tamil Nadu, Chhattisgarh, Jharkhand and Arunachal Pradesh, some part of Jammu & Kashmir, most part of Himachal Pradesh, Uttarakhand, Konkan & Goa, Coastal Karnataka, South Interior Karnataka. 22 to 26⁰C in little part of Jammu & Kashmir and Himachal Pradesh.



Maximum Temperature anomaly ranges between 1 to 3⁰C over little part of Jammu & Kashmir, Punjab, Uttar Pradesh, Sikkim, Gujarat and Orissa, some part of Kerala and Bihar, most part of Rajasthan, Madhya Pradesh, Maharashtra, Karnataka and Lakshdweep. -1 to 1⁰C in remaining part of the country except in little part of Tamil Nadu and Kerala where it was -3 to -1⁰C.

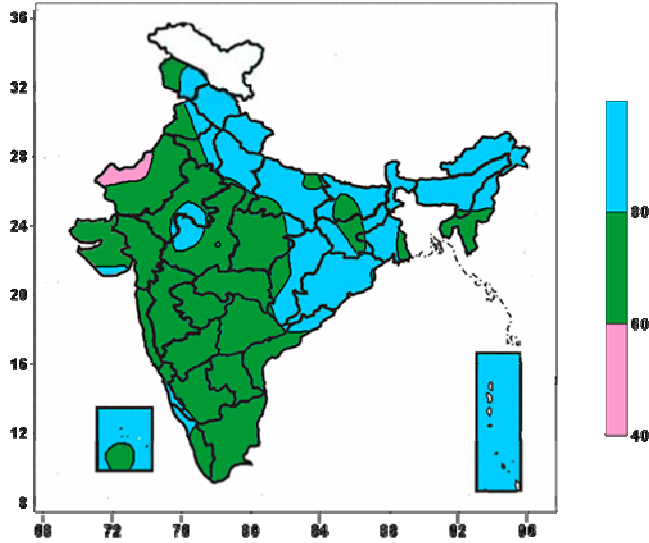


Actual Mean Minimum Temperature ranges between 26 to 30⁰C over some parts of Punjab, West Rajasthan, Uttar Pradesh, most parts of Haryana, Bihar and Gangetic West Bengal, 18 to 22⁰C in little parts of Jammu & Kashmir, West Madhya Pradesh, Tamil Nadu, Kerala and Jharkhand most parts of Konkan, Madhya Maharashtra, Coastal Karnataka, Interior Karnataka, 14 to 18⁰C in little parts of Jammu & Kashmir and Himachal Pradesh and 22 to 26⁰C in remaining parts of the country.



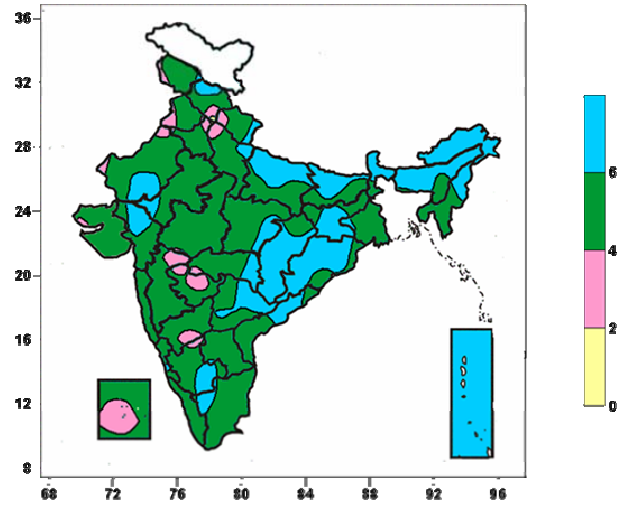
Minimum Temperature anomaly ranges between 1 to 3⁰C over little part of east Madhya Pradesh, east Uttar Pradesh, Marathwada, North Interior Karnataka, Telangana and some part of West Rajasthan, -3 to -1⁰C in some parts of Jammu & Kashmir, Jharkhand, Chattisgarh, South Interior Karnataka and Tamil Nadu and -1 to 1⁰C in remaining parts of the country.

Relative Humidity (%) over India for the week ending 27.08.08



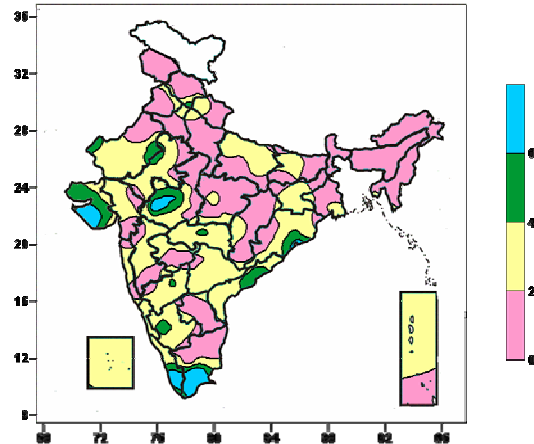
Relative Humidity was above 80 and upto 100% in the little part of East Rajasthan, West Madhya Pradesh, South Gujarat, some parts of Coastal Karnataka, North India, East India, North East India and 40 to 60% in some parts of West Rajasthan and 60 to 80% in remaining part of the country.

Cloud amount (okta) over India for the week ending 27.08.08



Cloud amount ranges between 6 to 8 okta in the little part of Himachal Pradesh, Uttarakhand, West Uttar Pradesh, West Madhya Pradesh, Vidarbha, Tamil Nadu and South Interior Karnataka, some parts of Telangana most part of East Uttar Pradesh, Bihar, Jharkhand, Sub Himalayan West Bengal Arunachal Pradesh, Assam, Orissa, Chhattisgarh, 2 to 4 Octa in little parts of North India, West India and Central India and Interior Karnataka and 4 to 6 Octa in remaining parts of the country.

Wind speed (knots) over India for the week ending 27.08.08



Wind speed ranges between 6 to 8 knots in some part of Saurashtra and Kutch, West Madhya Pradesh, some parts of Tamil Nadu and Kerala and 4 to 6 knots little parts of Rajasthan, West Madhya Pradesh, Interior Karnataka, Vidarbha, Orissa and Coastal Andhra Pradesh, 0 to 2 knots in most parts of North India, East India, North east India, central India, South Maharashtra, Rayalaseema and Tamil Nadu and 2 to 4 knots in remaining part of the country.

Districts experiencing stress condition

State	Most Stress *	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
East MP	Umaria	**	-75	-100	-49	-62
	Damoh	**	-32	-25	-83	-76
West MP	Khargone	**	-72	-67	-86	-49
	Betul	**	-33	-66	-88	-41
	Rajgarh	**	-25	-53	-89	-63
	Ratlam	**	-46	-35	-89	-29
	Ujjain	**	-58	-54	-88	-51
	Vidisha	**	-20	-100	-71	-92
Gangetic West Bengal	Nadia	-71	-73	-60	-91	-87
Assam	Darrang	-45	-90	-61	-53	-63
	Dhubri	-79	-91	-30	-86	-99
Karnataka (NIK)	Bagalkot	-16	-56	-47	-91	-37
	Gadag	-25	-67	-23	-83	-94
	Raichur	9	-47	-62	-59	-76
Karnataka (SIK)	Bellary	-35	-27	-44	-47	-51
	Hassan	58	-57	-39	-66	-47
Chhattisgarh	Dhamtari	8	-64	-100	-76	-78
Kerala	Thiruvananthapuram	141	-86	-34	-65	-97
East Uttar Pradesh	Unnao	-21	-99	-100	-99	-77
West Uttar Pradesh	Meerut	-69	-96	-100	-77	-57
Madhya Maharashtra	Jalgaon	124	-42	-33	-64	-67
Marathwada	Parbhani	105	-38	-33	-52	-67

State	More Stress	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Karnataka (NIK)	Koppal	-16	-1	-50	-78	-99
	Gulbarga	89	16	-28	-53	-50
East MP	Jabalpur	**	89	-100	-100	-80
	Narsingpur	**	66	-100	-86	-21
	Sagar	**	41	-91	-97	-74
	Seoni	**	44	-100	-88	-81
		Guna	**	8	-100	-88
West M.P.	Harda	**	-1	-100	-90	-100
	Hosangabad	**	75	-97	-93	-88
	Khandwa	**	-4	-81	-85	-60
	Mandsaur	**	-6	-71	-88	-61
	Sehore	**	-5	-100	-97	-68
	Sheopur Kalani	**	99	-82	-88	-52
		Kanker	-34	5	-100	-75
East Rajasthan	Baran	-21	27	-45	-84	-69
	Bhilwara	-10	33	-31	-94	-77

	Bundi	-25	7	-58	-72	-71
	Jaipur	-72	33	-36	-55	-96
	Jhalawar	-13	-1	-30	-95	-47
	Kota	-42	130	-65	-83	-82
	Rajsamand	17	77	-28	-89	-70
	Sawai Madhopur	-47	60	-73	-87	-92
	Sikar	-98	190	-58	-76	-99
	Sirohi	-49	78	-30	-99	-92
West Rajasthan	Bikaner	-36	369	-26	-79	-100
	Jodhpur	-68	319	-58	-100	-84
Haryana	Rewari	-72	19	-21	-53	-100

State	Stress	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Haryana	Faridabad	-34	-83	4	-77	-45
	Hissar	-100	-52	46	-54	-100
	Rohtak	-72	-80	7	-31	-100
Karnataka (NIK)	Belgaun	32	30	21	-33	-96
	Bidar,	38	74	3	-96	-53
	Dharwad	28	8	10	-64	-100
Karnataka (SIK)	Davangere	44	4	-7	-28	-87
Madhya Maharashtra	Dhule	136	-66	9	-85	-21
	Sangli	-30	-77	205	-48	-90
	Pune,	-45	-64	101	-65	-88
	Nandurbar	-64	-63	263	-67	-81
Marathwada	Nanded	-26	-45	18	-95	-84
	Aurangabad	12	-41	0	-66	-47
	Beed	-3	63	18	-74	-65
	Jalna	63	-57	-4	-73	-41
Vidarbha	Akola,	57	-49	11	-76	-61
	Amraoti	115	-45	-16	-71	-34
	Buldhana	114	-50	-3	-80	-36
	Latur	-20	34	17	-93	-74
West M.P.	Badwani	**	-79	**	-84	-100
	Bhopal	**	6	27	-97	-79
	Dhar	**	-79	53	-82	-65
	Jhabua	**	-65	61	-84	-47
Chhattisgarh	Dantewara	123	52	**	-85	-85
Gujarat	Ahmedabad	9	154	35	-45	-67
	Anand	-30	53	98	-62	-82
	Baroda	-7	4	170	-70	-52
	Dahod	-41	-17	99	-61	-31
	Kheda,	34	39	178	-57	-65
	Narmada	-59	12	135	-73	-77
	Surat,	-19	52	191	-74	-60
	Diu	265	-26	242	-94	-81
	Jamnagar	121	-38	0	-22	-100
	Junagarh	278	-39	43	-82	-99
	Kutch	-47	71	46	-53	-100
	Porbandara	332	-30	22	-90	-100

Kerala	Alappuzha,	103	-100	68	-65	-90
	Kollam,	162	-100	65	-81	-75
	Malappuram,	39	-86	41	-84	-94
	Palakkad,	60	-32	27	-73	-87
	Pathanamthitta	123	-100	130	-76	-92
Punjab	Faridkot	-100	-100	304	-100	-100
	Ferozpur	-100	-100	3	-79	-100
	Muktesar	-100	360	92	-100	-100
East Rajasthan	Ajmer	-32	162	95	-96	-96
	Alwar	-66	7	-9	-53	-80
	Banswara	-2	-53	5	-96	-70
	Jhunjhunu	-92	184	-15	-68	-100
	Tonk	-74	74	-11	-79	-54
West Rajasthan	Barmer	-31	15	62	-100	-100
	Churu	-74	271	83	-64	-100
	Hanumangarh	-95	394	0	-79	-100
	Jaisalmer	-49	1014	13	-100	-100
	Jalore	-29	55	64	-100	-60
	Nagaur	-71	418	1	-76	-83
	Pali	-59	133	84	-100	-93
	Sri Ganganagar	-93	546	47	-100	-82

* Most stress (more than 3 weeks continuously deficient to no rain)

More stress (3 weeks continuously deficient to no rain)

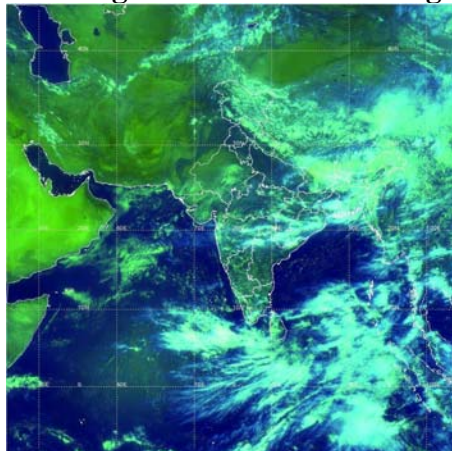
Stress (2 weeks continuously deficient to no rain)

Districtwise Rainfall Distribution for the country is given in Annexure I.

Chief Synoptic Feature (Based on 1430 hours IST observations of 27th August, 2008)

- The axis of monsoon trough passes through foothills of the Himalayas. Morning's upper air cyclonic circulation over West Uttar Pradesh and neighbourhood persists.
- Under this scenario, widespread rainfall activity with isolated heavy to very heavy rainfall is likely over Arunachal Pradesh, Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim during next 2-3 days. Fairly widespread rainfall with isolated heavy falls also likely over Bihar during next 48 hours.
- Morning's cyclonic circulation over north Tamil Nadu and adjoining South Interior Karnataka and Rayalaseema in lowers levels persists. Under its influence fairly widespread rainfall activity with isolated heavy falls is likely over Tamil Nadu, Kerala, south Karnataka and Rayalaseema during next 48 hours.
- Subdued rainfall activity likely to continues over the central parts of the country during next 2-3 days.

Satellite image of 8 UTC on 29th August 08



Zone-wise Forecast

NORTHWEST INDIA [J & K, H. P., UTTARAKHAND, PUNJAB, HARYANA, DELHI, WEST UP] (Forecast valid upto 1430 hours IST of 31st August, 2008)

- Rain/thundershowers are likely at a few places over West Uttar Pradesh and Uttarakhand. Isolated rain/thundershowers are likely over the rest region.

Quantitative District Weather Forecast for next five days:

- There is no chance of rain in Delhi and West Uttar Pradesh and light rain will occur over the remaining part of the region.

EAST INDIA [EAST UP, JHARKHAND, BIHAR, ORISSA, WEST BENGAL & SIKKIM] (Forecast valid upto 1430 hours IST of 31st August, 2008)

- Rain/thundershowers are likely at most places over Sub-Himalayan West Bengal & Sikkim. Rain/thundershowers are likely at many places over Bihar during next 48 hours and decrease thereafter. Rain/thundershowers are likely at a few places over Gangetic West Bengal, Jharkhand and East Uttar Pradesh. Isolated rain/thundershowers are likely over the rest region.

Quantitative District Weather Forecast for next five days:

- Light to rather moderate rainfall will occur over the region except in Sikkim where rather moderate to rather heavy rainfall will occur.

NORTHEAST INDIA [Arunachal Pradesh, NMM & T, Assam, Meghalaya,] (Forecast valid upto 1430 hours IST of 31st August, 2008)

- Rain/thundershowers are likely at most places over Arunachal Pradesh and Assam & Meghalaya. Rain/thundershowers are likely at many places over the rest region.

Quantitative District Weather Forecast for next five days:

- Rather moderate to rather heavy rainfall will occur over the region except on some occasions heavy rainfall will occur.

SOUTH INDIA [TN, AP, KERALA,, KARNATAKA, LAKSHADWEEP, ANDAMAN & NICOBAR ISLANDS] (Forecast valid upto 1430 hours IST of 31st August, 2008)

- Rain/thundershowers are likely at many places over Tamil Nadu & Puducherry, Coastal & South Interior Karnataka, Kerala and Rayalaseema during next 48 hours and decrease thereafter. Rain/thundershowers are likely at a few places over North Interior Karnataka. Isolated rain/thundershowers are likely over the rest region.

Quantitative District Weather Forecast for next five days:

- Light to rather moderate rainfall will occur over the region for next five days.

WEST INDIA [GOA, MAHARASHTRA (OTHER THAN VIDARBHA), GUJARAT, RAJASTHAN] (Forecast valid upto 1430 hours IST of 31st August, 2008)

- Rain/thundershowers are likely at a few places over Konkan & Goa during next 48 hours and increase thereafter. Isolated rain/thundershowers is likely over the rest region.

Quantitative District Weather Forecast for next five days:

- There is no chance of occurrence of rain in Gujarat and Rajasthan and light rain will occur in Maharashtra.

CENTRAL INDIA [M.P., CHHATTISGARH, VIDARBHA] (Forecast valid upto 1430 hours IST of 31st August, 2008)

- Isolated rain/thundershowers are likely over the region.

Quantitative District Weather Forecast for next five days:

- There is no chance of occurrence of rain in West Madhya Pradesh and light to rather moderate rainfall will occur over Chhattisgarh and East Madhya Pradesh.

Warning :

- Isolated heavy to very heavy rainfall is likely over Assam & Meghalaya, Arunachal Pradesh and Sub-Himalayan West Bengal & Sikkim. Isolated heavy rainfall is also likely over Tamil Nadu, Coastal & South Interior Karnataka and Bihar.

Weather Outlook from 1430 IST of 31st August to 1430 IST of 2nd September, 2008 (Based on numerical weather products):

- Decrease in the intensity of rainfall activity over northeastern states and Sub-Himalayan West Bengal & Sikkim. Fairly widespread rainfall activity is likely along the west coast.

Zonewise Agromet Advisories

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

Himachal Pradesh

- **Standing crops:** Vegetables (vegetative / flowering / fruiting / harvesting), Maize (vegetative), Rice (tillering), Apple (fruit development), Tea (plucking), new planting of evergreen fruit plants.
- As the districts like Chamba and Lahaul and Spiti received no significant rain during last few weeks and rain is likely to occur only at isolated places, apply irrigation to the standing crops in these districts. As the remaining districts received rain during last few weeks, postpone irrigation to the crops.
- As the weather condition is favourable, undertake intercultural operation in the standing crops.
- It is optimum time for planting of evergreen plants like Mango, litchi, guava, citrus, loquat and amla in Sub-mountain & Low hills Sub tropical zone.

Plant Protection:

- The weather is congenial for spread of fruit rot in tomato, chilli and Shimla mirch. For control apply Dithane M-45 @ 2-3 g per litre of water in 10-15 days interval.
- Rice blast is appearing and there is also more chance of infestation as weather condition is conducive. For control, spray Blitox-50 (3 g per litre of water) or Bavistin (1 g per litre of water). Weather is also conducive for infestation of rice hispa. For control, chlorpyrifos 20 EC @ 2.5 ml per litre may be applied if infestation crosses economic threshold level.
- **Animals:** Weather is conducive for spread of FMD and galgotu in animals. Farmers are advised for vaccination of animals against FMD.
- **Poultry:** As humidity is increasing, replace the poultry houses with fresh litter to avoid wetting and keep the houses clean. Climate is also congenial for attack of Diarrhia and cocksedia. Consult the nearby veterinarian under these circumstances.

Uttarakhand

- **Standing Crops:** Sugarcane (vegetative), Maize, groundnut and vegetables (vegetative/flowering), Rice (early vegetative / tillering), Urd(early vegetative)
- As there was sufficient in all the districts of the State during last week and rain / thundershowers are likely at a few places, postpone irrigation to the crop. Provide adequate drainage facilities in sugarcane and maize crops.
- Application of fertilizers and intercultural operation in early sown crops may be carried out on a non rainy day.
- Maintain 3 – 5 cm of water in rice the field.

Punjab

- **Standing Crops:** Rice (seedling/early vegetative), Horticultural crops (vegetative), Sugarcane (vegetative), Early sown cotton, maize and groundnut (early vegetative to late vegetative), Sunflower (vegetative/flowering).
- As most of the districts received insufficient rain during last week in Amritsar, Bhatinda, Faridkot, Fatehgarh Sahib, Ferozpur districts and rain is likely to occur at isolated places only for next three days, farmers are advised to apply irrigation and intercultural operations. Postpone irrigation in the above mentioned districts as there was sufficient rain during last two weeks.
- Farmers are advised to complete sowing of short duration hybrid maize 3459, PMH2 & Parkaash in the remaining areas of undulating plain comprising of Gurdaspur, Hoshiarpur, Ropar, and Patiala districts utilizing the rainfall during last week and as rainfall is also expected during next three days.

- Farmers are advised to undertake transplanting of brinjal in Bhatinda, Moga, Faridkot, Amritsar and Mukstar districts utilizing the rainfall during last week and as rainfall is also expected during next three days.

Haryana

- **Standing Crops:** Rice (early vegetative / tillering), Sugarcane (vegetative), Horticulture crops (vegetative), Sunflower (vegetative/flowering) and Bajra(vegetative).
- As most of the districts received insufficient rain during last week and rain is likely to occur at isolated places, farmers are advised to apply irrigation and intercultural operation to the crops.
- Farmers are advised to undertake transplanting of brinjal utilizing the rainfall during last two weeks and also rain is likely to occur in the State during next three days.
- Farmers are advised to continue application of top dressing of urea to bajra.

Delhi

- **Standing crops:** Maize (tasseling / silking / cob formation stage), arhar, bajra and fodder sorghum (vegetative stage), Sugarcane (vegetative stage). *Kharif* rice (tillering stage).
- As there was sufficient rain during earlier weeks, postpone irrigation to the standing crops.
- As there is no chance of rain, weather is favourable to undertake intercultural operation to the standing crops.
- As weather will be conducive, farmers are advised to undertake earthing up in sugarcane crop to prevent lodging.
- As this is the optimum time, the farmers are advised to prepare land and sow carrot.

Plant Protection:

- Weather is conducive for infestation of yellow mosaic in green gram and black gram. Farmers are advised to control vector white fly to restrict the spread of the disease.
- There is chance of attack of bacterial leaf blight and blast in rice due to favourable weather condition. Farmers are advised to mix Streptocycline (100 g) + Blitox (500 g) in 500 litres of water and apply for one hectare of land to control bacterial leaf blight. Repeat the same at 10 days interval for 2 – 3 times depending on the requirement. To control blast apply Bavistin 50 WP @ 1 g per litre of water at 10 days interval for 2 – 3 times.
- There is chance of attack of downy mildew in bajra due to favourable weather condition. Farmers are advised to collect and destroy the infected plants and also to apply Dithane Z 78 (0.2%) or Copper oxychloride (0.35%).
- There is chance of attack of tikka leaf spot in groundnut due to favourable weather condition. Farmers are advised to apply 0.05% Bavistin + 0.2% Dithane M 45 to control the disease.

Uttar Pradesh

- **Standing Crops:** Summer sugarcane (vegetative), Mango trees (fruit setting), Kharif Rice (proper time for transplanting), Kharif pulses and maize (proper time for sowing).
- As there was rain in most of the districts and are rain/thundershowers are likely at a few places over the State during next three days, postpone irrigation to sugarcane and early sown kharif crops. Mau, Deoria, Unnao, Ghaziabad, Jalaun, Jhansi, Jotirba Phule Nagar, Mainpuri, Meerut, and Muzzaffarnagar districts received deficient or scanty rainfall during last few weeks, apply irrigation to standing crops in these districts.
- Undertake intercultural operations, application of fertilizers and pesticides in early sown crops like maize, til, urd, on a non rainy day.
- Farmers in Bahraich, Bareilly, Bijnore, Pillibhit, Rampur, Saharanpur and Sharaswati nagar are advised to complete transplanting of rice and also transplantation of seedling in place of rotten

seedlings. Topdressing of recommended amount of Nitrogen may be done as per requirement in early transplanted rice on a non rainy day.

- Undertake transplanting of brinjal, tomato and chillies (plains) and cauliflower in hilly region. Complete sowing of soyabean utilizing the rainfall received during last week and good amount of rainfall is expected during next 2-3 days.
- **Plant Protection:** Weather conditions are conducive for mild incidences citrus canker in Allahabad, Banda, Barari, Chitrakut, Hamirpur, Jalaun, Jhansi, Lalitpur and Mahoba districts. Monitor the crop and spray Blitox @ 3-4 g/liter of water to control canker on a non rainy day.

J & K

- **Standing Crops:** Pulses (vegetative), Rice (vegetative stage in Kashmir division).
- As rain/thundershowers is likely at isolated places during next two days, apply irrigation to the standing crops in Kashmir division.
- In Jammu regions, drain out water from maize, bajra and pulses fields under water stagnation condition in low laying areas.
- Undertake sowing of cabbage and cauliflower in the nursery in Jammu and Kashmir divisions and planting of fruit crops like mango, citrus, litchi, loquat, guava, amla and papaya in Jammu division.
- **Plant Protection:** Monitor brinjal, tomato and bhindi crops for phytoplasma in Jammu region. Rogue out the affected plant to prevent further spread.
- Present weather is congenial for blight and leaf spot in tomato and downy mildew in cucurbits. Monitor the crops for the diseases and spray the crop with fixed copper @0.3% or diathane Z-78 @0.2% at 10-12 days intervals in Jammu region.
- Weather is congenial for mild incidences of fruit fly in guava. Monitor the guava trees and collect and destroy the affected fruits and use pesticide bait to control the pest.

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

Bihar

- **Standing Crops:** Sugarcane (vegetative), Kharif rice (early vegetative), Maize (vegetative), Pulses(vegetative)
- There are reports of flood due to breaching of embankment of Kosi river in Bihar. The severely affected districts are Madhepura, Araria, Purnea, Katihar, Khagaria, Supaul, and Saharsa and about 60-70% area of the standing crops were submerged with 3-4 feet water depth.
- Transplanting of over aged photo sensitive rice varieties may be completed utilizing the rainfall during last week and 3-4 seedlings per hill in close spacing may be planted in regions except Pusa and Samastipur region. Farmers in Pusa & Samastipur region can wait for receding of flood water entirely and continue when the conditions become favourable for transplanting.
- As there rain/thundershower are likely at many places over the State for the next three days, postpone irrigation to the standing sugarcane, maize, arhar, til, sunflower and vegetable crops. Arrange for drainage facilities in the early sown crops to avoid water stagnation.
- Land preparation for September sowing of arhar may be started with the realized rainfall during last week in regions except Pusa and Samastipur region.
- Khaira disease has been observed in rice in some places of north west alluvial plain zone comprising West Champaran, East Champaran, Gopalganj, Siwan, Saran, Sitamarhi, Muzaffarpur, Madhubani, Darbhanga, Samastipur, Sheohar, Begusarai, Vaishali districts. Spraying of Zinc sulphate on affected crops may be done on a non rainy day.
- Undertake intercultural operations, spraying and application of fertilizers in rice, maize, vegetables and pulse crops after current spells of rain.

Jharkhand

- **Standing Crops:** Kharif rice, arhar and Early sown maize (early vegetative).
- As there was rainfall in most of the districts during last few weeks and rain/thundershower are likely at a few places over the State for the next three days, postpone irrigation to early sown maize, arhar, urd and vegetables. Arrange for drainage facilities to avoid water stagnation.
- Farmers are advised to complete preparation of main field and undertake transplanting of *kharif* rice in low lands of remaining areas to be sown as there was good amount of rainfall was received during last few weeks and the same is expected for the next three days.
- Transplanting of tomato may be continued with varieties like Pusa rubi, Pusa early, selection-12 etc. in Dumka and adjoining districts as there was good amount of rainfall was received during last few weeks and the same is expected for the next three days.
- Undertake intercultural operations, spraying and application of fertilisers in early sown maize, arhar, urd and vegetables on a non rainy day.

Orissa

- **Standing crops:** *Kharif* Rice (proper time for transplanting), Sugarcane (vegetative), Maize, cotton (proper time for sowing of maize and cotton), Early sown crop (early vegetative), Early sown Jute (early vegetative).
- Start sowing of niger in the fallow up lands of East & South Eastern coastal plain zone comprising of Cuttack, Gajapati, Ganjam, Jagatsighpur, Nayagarh, Khurda, Kendrapara, Puri, North Central Plateau zone comprising of Mayurbhanj, Keonjhar and also Bhubaneswar districts as there was sufficient rainfall occurred in these districts during last week and good amount of rainfall is expected during next five weeks. High yielding varieties such as Deomali and IGP-76 may be selected and adopt seed rate @ 4 kg seeds / acre along with seed treatment. As there was sufficient rainfall in most of the districts during last two weeks, postpone irrigation to the standing crops.
- Farmers are advised to apply top dressing of fertilizers in transplanted rice and other crops.
- Due to prevailed high rainfall and cloudy conditions in Bargarh, Bolangir, Boudh, Chiplima, Jharsuguda, Sambalpur, and Sonepur, there is possibility of stem borer and gall midge incidence in rice. Apply Carbofuran 3G @ 12 kg/ac.
- There is possibility of occurrence of aphid in maize crop in the prevailing weather in Keonjhar and Mayurbhanj districts and apply 300 ml Metasystox in 200 litre of water per acre as foliar spray.
- Weather conditions are favourable for the attack of stem borer and blast in rice in Chiplima district. Monitor the crop for the pest and disease and spray Chlorpyrifos @ 400 ml/acre to control the pest and spray Biomycin @ 2 ml/liter of water.

West Bengal

- **Standing Crops:** Sugarcane (vegetative), jute (vegetative / maturity), *Aus* rice (grain formation / early maturity), Pigeon pea and soybean (vegetative), Already transplanted *aman* rice (early vegetative / tillering), This is the time for preparation of land and sowing / transplanting of *aman* rice, sowing of tomato, bhindi, ridge gourd, pumpkin, bitter gourd and nursery preparation of cauliflower.
- As most of the districts of West Bengal received rain during earlier weeks and rain is also likely to occur at most places over Sub Himalayan West Bengal and at a few places over Gangetic West Bengal, postpone irrigation to the crops. Also arrange for draining out excess water from the fields in Sub Himalayan West Bengal.
- Undertake land preparation and complete transplanting of *aman* rice if not done till date. In case of late sown crop, the planting density should be increased. Recommended density is 20cm X 10cm. Four to five weeks old seedlings can be transplanted.
- As the weather condition is favourable, prepare nurseries for early cauliflower. Select improved varieties of cauliflower like Kanwari, Jowhar, Moti, Early Patna etc.

- Undertake cultivation of tomato. Select improved varieties of tomato like Pusa Rubi, Pusa Early, Pusa Ketki, S-20, Roma Super etc. and some leaf curl virus tolerant hybrid varieties like NS-585, NP-5005, INDUM-9502, 9802 etc.
- As this is the proper time for sowing of vegetables like bhindi, ridge gourd, pumpkin and bitter gourd, the farmers are advised to sow these crops. Select varieties like Pusa sawani, Parbani kranti, Arka anamica, Bijoy, Barsa (Hybrid) for sowing of bhindi.
- Undertake sowing and transplanting in Sub Himalayan West Bengal after current spells of rain.

Plant Protection:

- There is chance of attack of blast in *aman* rice in Red Lateritic zone. For controlling blast farmer friends can spray with carbendazim 50% (Bavistin) @ 1gm per litre of water on a non-rainy day.
- In the prevailing weather situation, infestations of leaf rot may be seen in case of cabbage, cauliflower and raddish in New Alluvial Zone. Apply 1 gm carbendazim or mancozeb per litre of water on a non-rainy day to control the attack.

Sikkim

- **Standing Crops:** Orange (fruiting/harvesting), Large cardamom (capsule development / maturity), Ginger (vegetative).
- As rain/thundershower are likely at many places over the State, postpone irrigation to orange, large cardamom, ginger and vegetable crops.
- Gap filling / replanting may be continued in newly planted large cardamom in mid and low hills up to August. Planting materials may be selected from high yielding sucker nurseries free from pest / disease infestation or diseases free high yielding elite garden. Chirke and foorkey infected plants may be destroyed by uprooting / burial at regular intervals in the pits. Regular inspections may be carried out to observe caterpillar/ shoot borer/shoot fly incidence if any and may be hand picked and destroyed mechanically. 1% Bordeaux mixture or copper oxychloride @ 3gm/ltr of water may be sprayed to the cardamom plants after spells of rain to protect from fungal diseases.
- During the tillering stage, drain out excess water due to excess rainfall and maintain water level of 3-4 cm in rice fields in medium and high hills to enable maximum tillering.
- Undertake earthing up and application of compost in seed potato in high hills after spells of rain.
- Monitor ginger for bacterial wilt in Medium and High hills and collect and destroy the affected plants completely to prevent further spread of the disease.

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

Assam

- **Standing crops:** Sugarcane (vegetative), arhar (vegetative), early transplanted *sali* rice (early vegetative / tillering), vegetables (sowing / vegetative / flowering / fruiting).
- As rain / thundershowers are likely at most places for next three days along with isolated heavy to very heavy rain for next 48 hours over the State, postpone irrigation to the crops. Also arrange for draining out excess water from the field.
- Late transplanting of *sali* rice seedlings of varieties like Monoharsali, Andrew Sali, Gitesh etc may be continued in upland and medium land situations. Postpone transplanting in lowland situation due to heavy rainfall forecasts in the coming 5 days. In case of over aged seedlings closer spacing (8 inch x 6 inch) with more number of seedlings (6-7 seedlings / hill) is advocated.
- In chronically flood-affected areas where flood is expected by the last part of August, varieties like Andrew Sali, Monohar Sali, KMJ-1-19-1 etc. should be selected. Seedlings can be transplanted up to 15th September. 4-6 seedlings per hill should be transplanted at closer spacing (15 cm X 15 cm).
- Undertake land preparation and sowing of other crops after current spells of rain.
- Prepare land and sow cauliflower, raddish etc. as early season crop. The early varieties of cauliflower like Pusa Ketaki, Pusa Deepali, Early Kuwary, Early Chinese Prince, Jowahar Moti etc. can be sown. Select varieties from Pusa Himani, Pusa Deshi etc. for sowing of raddish.
- This is also proper time for sowing of sesamum and black gram. Select recommended varieties of sesamum like Madhabi, Gauri, Binayak, Punjab Til No-1 etc. and for black gram like T-9, T-27, Pant U-19, T-122 etc.

- The cows and goats should not be allowed to feed on submerged rotted grasses.

Arunachal Pradesh

- **Standing crops:** Ginger (rhizome formation), Vegetables (harvesting), Wet seeded rice (vegetative), Jhum rice (grain formation), Millets (grain formation) and maize (maturity).
- As there was excess rainfall in most of the districts during last week and rain/thundershower are likely at most places along with heavy to very heavy rainfall at isolated places over the State, postpone irrigation to the standing maize (cob formation), millet and ginger crops. Provide adequate drainage facilities in ginger crop to prevent the spread of rhizome rot disease.
- Undertake intercultural operations, application of fertilizers and pesticides in ginger, wet seeded rice, jhum rice and millets after current spells of rain.
- Farmers are advised to start land preparation and sowing of winter vegetables after current spells of rain as there was excess/heavy rainfall during last week and also rainfall is likely at most places with heavy to very heavy rainfall at isolated places over the State.

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

Andhra Pradesh

- **Standing Crops: Sugarcane (grand growth), Rice (transplanting/vegetative)**

Coastal AP

Plain Land

- Farmers in Krishna, Guntur and Prakasam districts are advised to continue transplanting of rice (BPT 5204).
- This is proper time for direct sowing of chillies. Farmers are advised to undertake land preparation and sowing of chillies in Krishna, Guntur and Prakasam districts by utilizing monsoon showers.
- Farmers in Visakappattinam are advised to complete transplanting of rice.
- Flood like situation is reported in Srikakulam district. Drain out excess water and apply urea to rice.
- **Plant Protection:** Attack of cut worm and sheath blight is reported in Swarna varieties of rice. Also due to high humidity and cloudy conditions, attack of blast is reported. Farmers are advised to undertake plant protection measures to control the pests and diseases.
- Damping off disease is reported in chillies. Spray Copper oxy chloride to control the disease.
- Monitor pulse crops for tobacco caterpillar and bacterial leaf spot. Spray Chloropyriphos @ 2.5 ml/l or Acephate @ 1.0 g/l of water to control the larvae at early stage. For the control of the grown up larvae, undertake poison baiting with rice bran, jaggary and Chlorpyriphos/Monocrotophos @ 10:1:1 ratio. For the control of bacterial leaf spot in pulse crops like green gram and black gram, spray Copper oxychloride @ 3 g/l + Streptocyclin @ 0.1 g/l of water.
- Weather is congenial for mild incidences of aphids, mealy bugs and jassids in cotton. Spray Monocrotophos in 1:4 or Imidaclopride in 1:20 ratio with water at 20, 40 and 60 days after sowing to control the pests.

High Altitude Areas

- Farmers in high altitude regions of Srikakulam, East Godavari, Vijayanagaram, Visakappattinam and Khammam are advised to continue transplanting of Sarwa rice upto end of August.

Rayalaseema

- Farmers in all the districts are advised to go for intercultural operation in early sown *kharif* crops under prevailing normal weather condition.
- Farmers in Anaparthapur and Kurnool are advised to continue transplanting of rice, sowing of sunflower and gram and planting of new orchards (papaya, mango and banana).
- **Plant Protection:** Attack of stem and bud necrosis and sucking pests is reported in groundnut in Ananthapur and Cuddappah districts. Farmers are advised to undertake plant protection measures after spells of rain to control the pests.

- Attack of red hairy caterpillar in groundnut, stem borer in paddy and internode borer in sugarcane is reported in Chiththoor district. Farmers are advised to undertake plant protection measures after spells of rain to control the pests and diseases. Farmers are advised to continue sowing of castor, red gram, horse gram and tomato in August.

Telangana

Farmers in Karimnagar, Nizamabad and Adilabad districts are advised to continue transplanting of rice. Farmers in the remaining districts are advised to go for intercultural operations in early sown crops under prevailing normal weather condition.

- **Plant Protection:** Attack of stem borer is reported in rice. Spray Carbofuran @ 10 kg/acre.
- Weather conditions are congenial for the attack of stem borer in maize and sucking pests in cotton. Monitor the crops for the pests and undertake plant protection measures.

Karnataka

- **Standing Crops:** Annual sugarcane (tillering), Early sown Kharif crops (vegetative).

Coastal Karnataka

- Farmers are advised to undertake transplanting of rice (Jyoti, MO 4 and Champaka) in Udupi and Dakshin Kannada. If nursery is not raised, undertake direct drum seeding of rice. Also undertake intercultural operations in early transplanted rice, cashew and banana.
- **Plant Protection:** Due to intermittent rains during last week, attack of case worm was noticed in rice. Farmers are advised to monitor the crop and pull rope across the field to reduce the pest population and spray Quinalphos @ 2 ml/litre to prevent further incidence.
- Due to high humidity, Colerago may attack arecanut. Monitor the crop and spray Bordeaux mixture @ 1%.

North Interior Karnataka

- Due to poor rainfall conditions in Bellary, Bijapur, Bagalkot, Raichur and Koppal districts, rainfed crops have been severely affected. Sowing of the crops (as in Annexure II) in Bellary, Bijapur, Bagalkot, Raichur and Koppal can be taken up during August second fortnight as and when sufficient rainfall is received.
- Farmers in Bijapur are advised to undertake sowing of kharif crops as in Annexure II as there was sufficient rainfall during last week.
- Farmers in Bidar region are advised to continue sowing of sunflower till the end of August with realized rainfall during last week.
- In view of sufficient amount of rainfall received during last week (21 mm), farmers in Gulbarga district are advised to continue sowing of sunflower (KBSH 1, RSH 1, SP 275, SP244 and Darsa Kaveri) during second fortnight of August.
- Farmers in Raichur area are advised to continue sowing of cotton (DCH-32, DHH-11, NHH-44 and Bt Hybrids) and sunflower (Morden, BSH-1, KBSH-1, RSFH-1).
- **Plant Protection:** Due to cold and cloudy weather conditions, attack of sucking pests in cotton, leaf eating caterpillars and leaf spot in groundnut and thrips, mites and murda complex in chillies is reported in Dharwad. Spray Dimethoate @ 1.7 ml to control sucking pests in cotton, Methyl Demeton @ 1 ml/litre of water to control eating caterpillars and Chlorothalonil @ 0.2% to control leaf spot in groundnut. Spray chemicals on a non rainy day.
- Due to continuous rain, powdery mildew is reported in black gram and green gram. Spray Carbendazim @ 1 g/litre of water. Also sucking pestsm leaf eating caterpillar and stem fly are noticed. Spray Monocrotophos @ 1 ml or Dimethoate @ 1.75 ml/liter of water on a non rainy day to control the pests.
- Monitor citrus for canker and spray Streptomycin Sulphate (0.5 g) + Copper oxi-chloride (2g)/liter of water on a non rainy day to control the disease.

- Due to cold and cloudy weather, necrosis is expected in sunflower in Dharwad. Spray Imidachloprid @ 0.25 ml/litre of water.

South Interior Karnataka

- Due to possibility of light rains during next five days, farmers in Bangalore, Kolar and Tumkur are advised to undertake intercultural operations and application of fertilizers in early sown crops. Undertake gap filling in millets to maintain optimum plant population. Apply Gypsum @ 200 kg/acre in 30 days old groundnut.
- Farmers in Mysore and Tumkur districts are advised to undertake sowing of ragi (GPU 28 and Indaf 5), sunflower (KBSH 41 and 44), maize (NAC 6004 and NAC 6002 varieties and Nityashri hybrid) and short duration pulses like green gram, black gram, cowpea and horse gram upto next month. With the receipt of water from KRS, undertake transplanting of rice (Thella, Hamza, KRH 1, Mangala, Mukthi, Bilimukthi and Rasi) and undertake planting of sugarcane (CO varieties – 419, 62175, 7804, 8371 and 86032). Due to cloudy weather, attack of blast is reported in rice and ragi nursery. Spray Hinosan or Kitacin @ 1 ml/litre of water after spells of rain to control the disease.
- **Animal Husbandry:** Undertake vaccination against FMD and Anthrax in cattle in Bangalore, Kolar and Tumkur.

Plant Protection: There are chances of Tikka leaf spot in groundnut, sucking pests in cotton, stem borer in maize, blast in rice and rhizome rot in ginger in Shimoga. Farmers are advised to monitor the crops for the pest and disease and undertake plant protection measures after spells of rain.

Kerala

- **Standing Crops:** Rice (tillering)
- Rain/thundershowers are likely to occur at many places for the next three days. Farmers are advised to postpone irrigation to rice and plantation crops.
- Farmers in Malappuram, Kasargod, Kozhikode and Kannur districts are advised to undertake intercultural operations and application of fertilizers in plantation crops (coconut, arecanut, pepper and cashew) and rice after spells of rain.
- Farmers in Wayanad and Idukki are advised to complete transplanting of Nanja rice (Samata Triveni, Wayanad 1, Kanchana, Varsha and Uma) with realized rainfall during last week and also with possibility of good amount of rainfall for the next five days. Undertake intercultural operations in coffee, pepper and ginger after spells of rain.
- **Plant Protection:** Weather conditions are favourable for the attack of bacterial leaf blight, leaf roller and case worm in Kottayam and Thiruvananthapuram. Monitor the crop and spray Sevin @ 4 g/litre of water. Due to congenial weather, spread of leaf roller and gall fly and sheath blight and leaf spot is expected in Kasargod, Kannur, Kozhikode, and Malappuram. Spray Ekalux @ 1 ml/litre to control leaf roller and gall fly. Spray Bavistin @ 1 ml/litre to control sheath blight and leaf spot after spells of rain
- Rice bug incidence may occur in rice at milk/dough stage in Thrissur and Thiruvananthapuram. Spray Malathion @ 2 ml/liter or Metacid @ 1 ml/liter after spells of rain to control the pest.
- Attack of mahali disease is reported in arecanut in Thrissur, Malappuram, Kasargod, Kozhikode and Kannur districts. Apply 1% Bordeaux mixture after spells of rain to control the disease.
- Weather conditions are favourable for the spread of Sigatoka leaf spot in Malappuram, Kasargod, Kozhikode, Kannur and Thiruvananthapuram districts. Spray *Pseudomonas* @ 2 g/litre of water or Bordeaux mixture @ 1% after spells of rain to control the pest.

Tamilnadu

- **Standing Crops :** Rice (Kuruvai) (transplanting/early vegetative/vegetative), Early, Mid Sugarcane (cane development/ maturity stage), Special season sugarcane (grand growth stage) Sorghum (vegetative) Cotton (boll maturity/picking stage)
- Postpone irrigation to groundnut, sugarcane and pulse crops as rain/ thundershowers likely at many places over the State.
- Continue transplanting of Kuruvai rice in the main field in Thanjavur, Trichy, Karur, Nagappattinam and Perambalur districts using canal water.
- Undertake sowing of bhindi, tomato and cowpea in Chennai, Cuddalore, Kanchipuram, Thiruvavur, Thiruvannamalai, Vellore and Villupuram districts using irrigation water.
- Farmers in Namakkal are advised to sow rice (CORH-3, CO-R-4 and CO-R-49) in nursery, hybrid maize (CO-HM-5), groundnut (VRI-6, VRI-7, TMV-13) and red gram (Vamban-3 and CO-RG-7) by utilizing the moisture in the field.
- Monitor poultry birds for Gumboro disease and undertake vaccination to prevent further spread in Namakkal area.
- Due to rainy conditions in Chennai, Cuddalore, Kanchipuram, Thiruvallur, Vellore, Villupuram, increase in vector activity resulting in a slight rise in arthropod borne diseases particularly blood protozoans like Anaplasmosis, Theileriosis and Trypanosomiasis and viral disease such as blue tongue amongst farm animals is expected. Undertake vector control for ticks and flies and midges under the guidance of veterinarians. Also avoid stagnation which can allow for fly and midges breeding sites. Also undertake prophylactic drenching with appropriate medication, for fluke infections like amphistomiasis and liveflukes.
- **Plant Protection:** Present weather is conducive for mild incidences of sheath rot disease in paddy in Coimbatore district. Spray Carbendazim @ 250 g/ha after spells of rain to control the disease.
- Weather conditions in Thiruvallur and Thiruvannamalai are conducive for mild incidences of stem borer, gall midge, thrips, nematode, blast and tungro infection in paddy nursery. Farmers are advised to monitor the crop for the pests and diseases and apply Carbofuran @ 33 kg/ ha 5-7 days before transplanting the seedlings.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT, RAJASTHAN]

Maharashtra

- **Standing Crops:** Sugarcane (pre-seasonal) (elongation / cane development), sugarcane (*Suru*) (active growth / elongation), irrigated cotton (floral bud formation / squaring), *kharif* groundnut (flowering / pegging in Kolhapur, vegetative / flowering in other parts of the State), *kharif* cotton (floral bud formation / squaring in Nasik, Latur and Amravati, vegetative / floral bud initiation in other districts), *kharif* rice (panicle initiation in South Konkan, flag leaf initiation in North Konkan and Kolhapur and Satara districts and tillering in other parts of the State), soybean (flowering / pod formation in Kolhapur and vegetative / flowering in other districts), tur and sunflower (early vegetative / vegetative), black gram (vegetative / flowering) and green gram (flowering / pod formation).
- As there was no significant rain in most of the districts of the State and there is also possibility of less rain during next five days, farmers are advised to apply irrigation to the crops.
- The weather is favourable for carrying out intercultural operation to keep the field weed free.
- As there is chance of less rain, apply second dose of Nitrogen (i.e. 870 gm Urea per 1 R area) to *kharif* rice in South Konkan and Sub Montane zone. Also apply 870 gm Urea + 2.5 kg Single super phosphate + 670 gm Murate of potash per Are in finger millet on a non-rainy day.

Plant protection

- There is chance of occurrence of mealy bug, aphids and jassids in cotton in Nasik and Latur division and powdery mildew in green gram in Central Vidarbha zone due to favourable weather condition.

To control mealy bug in cotton, spray *Vertisilium lekaini* or *Metarizium annesopli* bacteria @ 40 gm in 10 liters water. If infestation is more spray 75 % Aciphet @ 30 gm or 76% Dichlorovhos @ 20 ml or 40% Trizophos @ 20 ml in 10 liters of water with 20 gm soap powder. To control powdery mildew in green gram, spray Dinocap @ 10 ml or Tridemorf @ 5 ml or Sulpher @ 30 g in 10 liters of water.

- There is chance of infestation of blast in *kharif* rice in Nagpur and Kolhapur division. For control spray Carbendazim @ 1 g / lit or Copper-oxy- chloride @ 2.5 g / lit of water with 1 ml sticker.
- There is possibility of occurrence of tikka in groundnut in Western Maharashtra Plain zone. For control of Tikka on Groundnut, spray Dithane M-45 @ 2.5 g in 10 liters of water.

Gujarat

- **Standing Crops:** Sugarcane (vegetative), *Kharif* groundnut (vegetative), *Kharif* cotton (early vegetative / vegetative), *Kharif* rice (early vegetative / tillering), other *kharif* crops (land preparation and sowing / germination / early vegetative / vegetative).
- Weather condition is favourable to carry out intercultural operation in standing crops in all the districts of Gujarat State.
- As there was no significant rain during last couple of weeks in most of the districts of the State and no significant rain is likely to occur during next five days, apply irrigation to the standing crops.
- Prepare land and undertake sowing of castor and vegetables utilizing rain occurred during earlier weeks. Select varieties from GAUCG-4, GAUCH-5 and GAUCH-6 for south Gujarat Agroclimatic zone and GAUCH-1, GCH-2, 4, 5, 6; GC- 2 for Ahmedabad and Bhavnagar districts for sowing of castor. Adopt seed rate of 6 to 8 kg / ha for sowing of castor.

Plant protection

- There is chance of infestation of mealy bug in cotton. To control the mealy bug, dusting of methyl parathion 2% or fenvalrate 0.4% dust should be done surrounding the plants and field boundaries. Spray the crop with profenophos 50 EC @ 20 ml in 10 litres of water along with 10 gram washing powder.
- There is chance of infestation of tikka leaf spot in groundnut. To control the tikka leaf spot farmers are advised to apply chlorothalonil @ 25 gm or hexaconazole @ 5 ml in 10 litre of water.

Rajasthan

- **Standing Crops:** Groundnut, bajra, jowar, maize, sesame, cluster beans, red gram, cotton, vegetables. All the crops are at vegetative stage.
- As rain/thundershower are likely at isolated places over the State during next three days apply irrigation to the crops.

East Rajasthan

- Farmers in Alwar, Bharatpur, Dholpur, Karauli and Sawai Madhepur are advised to drain out excess water from orchards. Complete planting of mango, guava, lime, ber, aonla, pomegranate and karonda etc. at the earliest.
- Vaccinate the cattle to save from infections against FMD and BQ in Alwar, Bharatpur, Dholpur, Karauli and Sawai Madhepur.
- **Plant Protection:** Weather conditions are favourable for mild incidences of Tikka leaf spot in groundnut in Alwar, Dholpur, Bikaner and Jaisalmer. Monitor the crop for the pest. To control the pest, spray Carbendazim @ 500 ppm.
- Weather conditions are favourable for mild incidences of white fly and jassids in cotton in Alwar and Dholpur. Monitor the crop for the pest. To control the pest, spray Dimethoate or Methyl Demeton @ 1 litre/ha.

- Weather conditions are favourable for wilt in Clusterbean in Alwar, Bharatpur, Dholpur, Karauli and Sawai Madhepur. Spray Streptocyclin @ 100 ppm to control wilt.
- Weather conditions are favourable for mild incidences of shoot borer in jowar in Alwar, Bharatpur, Karauli, Sawai Modhpur. Spray Endosulphan 35 EC @ 1.25 litre/ha to control the pest.
- Downy mildew disease may attack pearl millet crop (at panicle initiation stage) in Alwar, Bharatpur, Karauli, Sawai Modhpur. Spray Zineb @ 2.5 kg or Mencozeb @ 2 kg per hectare 2-3 times at an interval of 3 days.
- Blight disease may attack tomato, brinjal & chilli crops in Ajmer, Dausa, Tonk due to continuous cloudy weather. In this disease brownish spots are formed on leaves farmers are advised to spray mencozeb @ 2 gm or copper oxychloride @ 3 gm or Redomil MZ-2 gm per litre water.
- Weather conditions are favourable for mild incidences of stem borer in maize in Karauli, Alwar, Dholpur, Sawai Modhpur. Spray Endosulphan 35 EC @ 1.25 litre/ha to control the pest.
- Weather conditions are favourable for mild incidences of jhulsa in tomato. Spray Dithane-M-45 @ 0.2% to control the pest.

West Rajasthan

- Farmers in Jalore and Jodhpur are advised to sow bajra and other pulse crops. Short duration varieties of pulse crops may be taken up for sowing. Optimum spacing may be maintained. Carry out inter-cultural operations and application of fertilizers.
- Weather condition is conducive for sowing of chillies and other vegetables in Barmer, Churu, Jalore and Jodhpur.
- Undertake sowing of sweet gourd, cucumber, pumpkin, bitter gourd, tinda, tomato and ladies finger in Barmer, Churu, Jalore and Jodhpur.
- Undertake inter-cultural operations and application of fertilizers in early sown cabbage in Barmer, Churu, Jalore and Jodhpur.
- Farmers in Pali district are advised to undertake planting of short duration fodder crops on priority basis. Apply first dose of nitrogen fertilizer to cotton crop. Undertake land preparation and sowing for rabi crops where kharif crops were not undertaken.
- Due to the possibility of high wind speed and temperature during next five days, chances of water stress may occur in early sown crops in Bikaner and Jaisalmer districts. Irrigation may be arranged in that stress conditions.
- **Plant Protection:** Weather conditions are favourable for mild incidences of bacterial blight in cluster beans in Bikaner and Jaisalmer districts. Monitor the crops for the disease. To control bacterial blight, spray Streptocyclin @ 1g/10 liters of water + Copper oxychloride @ 0.2%
- Weather conditions are favourable for mild incidences of leaf eating caterpillar in bajra, pulses, fruits and vegetable crops in Barmer, Churu, Jalore and Jodhpur. Spray Qunalphos @ 1.5 kg or Endosulphan @ 4.25 kg/hectre to control the pest. For controlling sucking pests, spray Monocrotophos @ 1 ml/litre of water.
- Monitor groundnut for crown rot in Barmer, Churu, Jalore and Jodhpur. Apply Trichiderma @ 1 kg/ha.

CENTRAL INDIA [M.P., CHHATTISGARH]

Madhya Pradesh

- **Standing Crops:** Sugarcane (grand growth), soyabean (vegetative), maize (vegetative), cotton (vegetative) and vegetable crops (nursery/transplanting).
- As there was no significant rainfall during last week and rain / thundershower is likely at isolated places over the State during next three days, apply irrigation to the crops.

- Prepare land and nursery for medium varieties of cauliflower. Undertake land preparation and planting of *kharif* vegetables like brinjal, tomato, early cauliflower and chilli in Jabalpur, Katni, Panna, Rewa, Satna, Seoni and Sidhi districts with a possibility of 15-35 mm rainfall during next five days. Also undertake planting of guava, citrus, mango and anola during this period.
- **Animal Husbandry:** Provide proper ventilation and clean water to cattle and arrange for vaccination to save them from infectious disease in Jabalpur, Katni, Panna, Rewa, Satna, Seoni and Sidhi districts. Due to the possibility of cloud weather during next five days, arrange for artificial light in poultry for maintain the egg production.
- **Poultry:** Due to possibility of Coccidiosis in Sehore poultry birds, maintain sanitation and aeration in the sheds.
- **Plant Protection:** There is chance of attack of semilooper and girdle beetle in soybean in Jabalpur, Katni, Panna, Rewa, Satna, Seoni and Sidhi districts. Monitor the crop for the pests and undertake plant protection measures to control the pest.
- Weather conditions are favourable for the incidences of green leaf hopper in maize and sucking pests in vegetable crops. Apply Phorate to control green leaf hopper and spray Methyl Demeton @ 1 ml/litre of water to control sucking pests.
- There is chance of attack of leaf eating caterpillars in rice in and around Jabhua. Spray Traizophos @ 2 ml/litre of water.
- Monitor groundnut for Tikka leaf spot in Khargone. Spray Mancozeb @ 2 g/liter of water. There is chance of attack of semilooper and girdle beetle in soybean. Spray Traizophos 40 EC @ 2 ml/litre of water.
- Monitor black gram, green gram and soyabean for hockmoth in Sehore. Spray Profenophos 50 E.C. @ 1.5 litres/hectre in 500 litres water Also monitor soyabean for tobacco caterpillar. Spray Quinalphos @ 1.5 litres/hectre in 600 litres water to control the pest at early stage.
- There is a possibility of stem borer in maize and jowar. Apply Phorate 10 G @ 8-10 granules/plant.

Chattisgarh

- **Standing Crops:** Autumn sugarcane (vegetative), Soybean, groundnut and black gram (vegetative / flowering), *kharif* rice (early vegetative / tillering), pigeon pea, green gram and sesame (early vegetative / vegetative / flowering).
- As Bastar, Janjgir, Mahasumund, Raigarh and Surguja districts received sufficient rain during last few weeks, postpone irrigation to the standing crops in these districts. As the remaining districts received no significant rain during last week and rain / thundershower is likely to occur only at isolated places over the State during next three days, apply irrigation to the standing crops in the districts.
- Due to poor rain during last few weeks in most parts of Rajnangdaon, Kowardah and Kanker districts and in some parts of Raipur, Bilaspur and Durg districts, farmers in these districts are advised to provide supplementary irrigation to early sown crops to overcome stress conditions.
- As the weather condition is favourable, undertake intercultural operation to keep the crop fields weed free. Also apply N in maize at knee high stage and 1st split dose of N at 3 weeks after transplanting and 2nd split dose of N at 6 weeks after transplanting in *kharif* rice.
- This is proper time for preparation of land and transplanting of chilli and brinjal and preparation of nurseries of early varieties of cabbage and cauliflower.
- Undertake sowing of okra as soon as possible. To save the crop from Yellow vein mosaic resistant varieties such as Pusa Vaibhav, Arka Anamika and Pusa Savani should be chosen. Also undertake sowing of cowpea and beans.
- Weather conditions are congenial for the occurrence of stem borer in rice. Monitor the crop for the pest and apply Carbofuran @ 10 kg/acre.
- Present Weather may lead to the incidence of tobacco caterpillar in soyabean in Kabhirdham, Durg and Rajnandgaon districts. Monitor the crop for the pest and spray Chlorpyrifos @ 2 litres/ha.

Annexure I
Rainfall distribution in different regions of the country during last
Five weeks (30/07/08 to 27/08/08)

NORTH WEST INDIA

Punjab-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Punjab-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Amritsar	-100	57	339	7	-100	Kapurthala	12	**	-100	603	-35
Bhatinda	-70	9	-34	99	-100	Ludhiana	-93	248	81	163	-64
Faridkot	-100	-100	304	-100	-100	Moga	-100	167	45	28	76
F. Saheb	-100	-83	-56	-23	-100	Muktesar	-100	360	92	-100	-100
Ferozpur	-100	-100	3	-79	-100	Nawashahar	-100	482	-13	338	-100
Gurdaspur	-99	12	3	133	-83	Patiala	-78	40	250	26	-98
Hoshiarpur	-96	138	77	144	-74	Ropar	-59	254	-9	156	-56
Jalandhar	-87	117	33	247	-90	Sangrur	-94	-86	-62	26	-100
Haryana-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Haryana-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Ambala	-36	174	109	40	-85	Karnal	-96	-25	-18	25	-96
Bhiwani	-88	311	232	55	-100	Kurukshetra	-100	-73	-31	-31	-100
Chandigarh	-60	361	40	-9	-75	Mahendragarh	-93	264	-4	-25	-100
Delhi	-52	-26	20	57	-97	Panchkkula	-96	-28	7	-63	-15
Fatehabad	-100	-59	-28	343	-100	Panipat	-100	-59	-45	-36	-100
Gurgaon	-81	-80	-4	5	-99	Sirsa	-99	35	93	-6	-100
Jhajar	-62	102	169	-9	-88	Sonepat	-42	-17	96	90	-100
Jind	-96	-54	37	10	-91	Yamunanagar	-40	127	-43	-8	-72
Katihal	-100	76	-13	-34	-100						
H.P.-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	H.P.-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Bilaspur	26	-21	82	123	-71	Lahaul & Spiti	-94	-73	-52	58	-59
Chamba	-63	-61	-73	-35	-71	Mandi	-55	-25	-47	8	-13
Hamirpur	-61	10	20	38	-76	Shimla	-68	-29	5	132	20
Kangra	-44	18	-49	26	-43	Sirmaur	-37	-21	-40	12	-52
Kinnaur	-99	-50	149	115	10	Solan	-63	-23	-6	76	-55
Kullu	27	70	43	130	95	Una	-65	135	136	209	-72
W.U.P.-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	W.U.P.-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Agra	-66	28	-37	77	-77	Jhansi	-14	84	-68	-38	-96
Aligarh	**	-95	-62	230	-49	Jotiba Phule Nagar	**	-32	**	**	-81
Auraiya	185	-60	-68	145	-35	Lalitpur	-100	-93	**	**	**
Badaun	-43	**	-84	-25	6	Mahamaya Nagar	**	**	**	**	**
Baghpat	-100	-100	**	89	-98	Mainpuri	-54	-98	-100	**	-86
Bareilly	-35	2	-49	187	-63	Mathura	7	196	72	79	-31
Bijnor	**	**	-100	-17	-83	Moradabad	-98	66	-21	44	-57
Bulandsahar	-52	10	6	220	-84	Muzzaffarnagar	-88	**	**	-100	-39
Etah	**	**	**	**	**	Pilibhit	-92	**	-99	-87	**
Etawah	8	-72	-50	36	-28	Rampur	-100	**	**	**	**
Firozabad	-79	-100	-90	**	-100	Saharanpur	-50	**	**	**	**
Ghaziabad	-100	-100	**	**	-95	Shahjahanpur	-16	-85	-12	221	-21

Hamirpur	59	-43	-47	15	-31	Jalaun	44	-67	-38	-29	-67
Uttarakhand Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Uttarakhand Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Almora	-86	-42	-96	-88	4	Haridwar	64	-42	-84	220	60
Chamoli	23	-11	17	-24	25	Nainital	-79	-14	-49	233	-19
Champawat	-42	3	33	85	80	Pithoragarh	-75	-65	-52	-81	-47
Dehradun	-58	72	31	48	-26	Rudraprayag	-55	-60	-29	-31	-62
Garhwal (P) Pauri	-100	15	-50	-37	26	Udham Sing Nagar	-88	-99	**	**	**
Garhwal (T)	-48	-5	-55	172	-9	Uttar Kashi	1	48	39	-15	77

EAST INDIA

G.W.B.-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	G.W.B.-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Bankura	61	-33	-22	129	-87	Murshidabad	**	-95	-65	44	-86
Birbhum	-66	-50	68	26	-74	24 Pargana (N)	-71	-73	-60	-91	-87
Burdwan	19	-69	55	44	-74	Purulia	54	-47	-18	49	-83
Hooghly	-81	-60	24	5	-98	24 Pargana (S)	-55	-63	10	-2	-60
Howrah	-12	-50	-8	-42	-64	Midnapore	-34	-66	61	-1	-75
S.H.W.B- Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	S.H.W.B- Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Coochbehar	-34	-16	13	106	51	Malda	13	-13	20	100	-70
Darjeeling	-45	94	1	70	-2	Dinajpur (N)	-79	47	**	**	-75
Jalpaiguri	-50	23	-13	73	32	Dinajpur (S)	-65	133	95	2	-83
Sikkim	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08						
Sikkim	-19	-26	-4	36	-20						
Orissa-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Orissa-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Angul	-11	-24	**	-6	1	Kandhamal	-7	-14	**	-35	73
Balasore	15	-56	**	-26	-85	Kendrapara	-35	-77	**	-3	-50
Bargarh	-6	-69	**	-4	159	Keonjhar	132	-26	**	-22	78
Bhadrak	-17	-54	**	-9	-43	Khurda	39	-2	**	-4	24
Bolangir	61	-39	**	79	7	Koraput	82	29	**	19	13
Boudh	51	-21	**	-31	83	Malkangiri	160	3	**	-56	-87
Cuttack	102	6	**	27	42	Mayurbhanj	39	-38	**	-10	-7
Deogarh	-86	-35	**	-24	-7	Nawapara	-13	-15	**	-7	-34
Dhenkanal	56	-20	**	-9	10	Nawarangpur	284	88	**	68	4
Gajapati	15	-2	**	15	-72	Nayagarh	209	79	**	105	36
Ganjam	121	**	**	47	-40	Puri	91	31	**	-38	17
Jagatsingpur	-10	-43	**	45	16	Rayagada	-11	18	**	-7	-73
Jajpur	34	-55	**	-36	-29	Sambalpur	-18	-32	**	-2	40
Jharsuguda	21	-83	**	138	1	Sonepur	18	-40	**	43	119
Kalahandi	74	-23	**	32	53	Sundargarh	40	-41	**	55	-26
Bihar-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Bihar-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Araria	43	-67	-65	297	**	Madhepura	**	**	**	**	**
Aurangabad	-15	-95	91	30	**	Madhubani	-64	-69	-76	55	**

Begusarai	**	**	**	**	**	Monghyar	-46	-49	240	306	**
Bhabua	**	**	**	**	**	Muzaffarpur	-38	-67	17	79	**
Bhagalpur	-62	-97	26	75	**	Nalanda	**	**	**	**	**
Bhojpur	-70	-98	7	89	**	Patna	-43	-94	146	105	**
Buxar	-44	-99	216	87	**	Purnea	-79	42	24	308	**
Darbhanga	-25	-75	-80	-11	**	Rohtas	-56	-96	97	18	**
East Champaran	-52	-72	22	189	**	Saharsha	-28	-9	-19	239	**
Gaya	-85	-92	-27	55	**	Samstipur	-53	-93	-63	65	**
Gopalganj	**	**	**	**	**	Saran	**	**	-61	**	**
Jhanabad	-45	-100	-32	**	**	Sitamarhi	6	-99	232	96	**
Jamui	**	**	**	**	**	Siwan	-43	-74	-20	154	**
Kathihar	-89	-41	48	130	**	Supaul	-90	-98	-61	-71	**
Khagadia	-68	-84	-20	191	**	Vaishali	-85	-98	-92	95	**
Kishanganj	**	-96	**	**	**	West Champaran	-52	-58	60	93	**
Jharkhand-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Jharkhand-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Bokaro	-37	-80	26	77	**	Lohardagga	**	**	**	**	**
Dhanbad	-12	-80	-9	9	**	Pakur	**	**	**	**	**
East Singbhum	-55	-70	-35	173	**	Palamau	-66	-67	72	62	**
Girioih	45	-42	**	69	**	Ranchi	25	-70	48	38	**
Godda	**	**	**	**	**	Sahebganj	**	-87	**	**	**
Gumla	**	**	**	**	**	Santhal Parganas	-40	-77	23	-4	**
Hazaribagh	-1	-82	123	248	**	West Singbhum	48	-80	-75	-60	**
Koderna	**	**	**	**	**						
E.U.P. Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	E.U.P. Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Allahabad	23	-92	143	48	-92	Kanpur Dehat	-26	-97	-47	39	-74
Amd Nagar	2	-84	**	**	**	Kheri	25	-28	-65	147	-1
Azamgarh	-100	-100	-69	48	-100	Kushi nagar	-21	**	-5	**	-15
Bahraich	-78	-56	-15	91	-5	Lucknow	66	-55	-86	207	**
Ballia	-33	-90	134	127	-55	Maharajganj	-94	-99	16	**	39
Balrampur	-96	-94	-47	135	-85	Mau	-14	-95	-77	-100	**
Banda	15	-84	-24	11	-83	Mirzapur	-29	-68	**	234	-100
Barabanki	37	-88	24	121	-63	Pratapgarh	58	-44	-20	-4	-92
Basti	31	-66	69	6	8	RaiBareilly	-23	-96	-25	127	-99
Deoria	-76	**	**	-74	**	S M Nagar	**	**	-6	**	-31
Faizabad	-38	-52	**	130	-100	S R Nagar	-77	**	-97	**	**
Farrukhabad	-22	-45	-23	95	-14	Shrawasti	-59	-44	-51	131	-88
Fatehpur	5	-94	-54	65	-95	Sidharthnagar	-73	-50	-8	48	95
Gazipur	44	-96	-82	51	-95	Sitapur	78	-64	91	216	-55
Gonda	-60	-83	-9	124	-87	Sonbhadra	-90	-98	-82	-34	-78
Gorakhpur	-53	-93	-59	182	76	Sultanpur	32	-92	98	158	-34
Hardoi	**	-85	40	176	-49	Varanasi	52	-98	-13	412	-67
Jaunpur	54	-99	-89	165	-29	Kanpur City	-7	-62	107	191	-28

NORTH EAST INDIA

Assam-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Assam-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Barpeta	-69	33	407	221	29	Kamrup	-48	-66	33	-3	-73
Bongaigaon	-64	-41	295	148	82	Karbj Analog	2	54	-33	185	119
Cachar	17	106	-31	39	95	Karimganj	-47	28	-69	-77	-67
Dibrugarh	-49	-8	-25	5	2	Kokrajhar	-61	-23	254	195	138
E G Hills	**	-62	89	109	-90	Lakhimpur	-61	-7	-46	91	-38
E K Hills	11	-26	83	218	9	Morigaon	-2	-37	-11	-6	-68
Goalpara	-43	-77	164	94	-57	N.C.Hills	**	**	**	**	**
Golghat	42	-48	-46	49	-58	Nalbari	-12	-55	107	-19	-64
Hailakandi	-55	281	42	31	175	Nowgong	-67	-17	-44	-17	30
Jaintia Hills	**	**	**	**	**	Sibsagar	-67	153	-90	-69	-19
Jorhat	-67	20	6	-36	1	Sonitpur	-2	40	41	-42	-29
						Tinsukia	-25	52	-70	52	33
Arunachal Pradesh	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Arunachal Pradesh	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Changlang	-73	-33	-58	-49	-54	Tawang	23	64	-30	18	84
DValley	**	**	**	**	**	Tirap	-25	29	-40	72	-27
E Kameng	-11	-57	33	218	-7	U Siang	**	**	**	**	**
E Slang	-58	-12	-42	87	153	USubansiri	-48	-54	33	3	-86
Lohit	-42	52	-70	11	48	W Kameng	40	176	151	152	-17
LSubansirt	-57	-39	29	-71	-89	W Stang	-87	**	65	**	**
Papumpara	-1	410	476	272	45						

SOUTH PENINSULA

Coastal Andhra Pradesh	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Coastal Andhra Pradesh	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
East Godavari	218	88	67	67	-44	Sirkakulam	7	78	29	29	-55
Guntur	154	290	-2	-2	8	Visakhapatnam	-15	45	-8	-8	2
Krishna	226	364	22	22	-38	Vizianagram	6	42	79	79	-22
Nellore	-36	64	200	200	26	West Godavari	233	147	94	94	-24
Prakasam	-26	116	-8	-8	0						
A.P.(T)-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	A.P.(T)-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Adilabad	152	48	-75	-75	-77	Medak	30	381	-53	-53	-39
Hyderabad	149	558	67	67	-38	Nalgonda	188	359	22	22	32
Karimnagar	110	153	-67	-67	-59	Nizamabad	34	170	-64	-64	-96
Khammam	189	198	114	114	-40	Rangareddy	95	360	-18	-18	-50
M nagar	12	79	-1	-1	-4	Warangal	240	238	53	53	-23
A.P.(R)-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	A.P.(R)-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Anantapur	-23	-9	-76	-76	158	Cuddapah	-30	-33	44	44	31
Chittoor	-79	-19	97	97	-20	Kurnool	34	73	-43	-43	22
Kerala-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Kerala-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Alappuzha	103	-100	68	-65	-90	Kozhikode	33	-51	362	-65	-98
Kannur	20	-92	199	-42	-92	Malappuram	39	-86	41	-84	-94

Ernakulam	8	-57	26	-25	-86	Palakkad	60	-32	27	-73	-87
Idukki	96	-100	101	-51	-30	Pathanamthitta	123	-100	130	-76	-92
Kasaragod	39	-76	-100	-5	-93	Thrissur	15	-95	29	-57	-95
Kollam	162	-100	65	-81	-75	Wyanad	28	-80	121	-81	-64
Kottayam	70	-94	83	-42	-92						
C. K'natka-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	C. K'nataka-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
D Kannada	60	-34	-13	-14	-91	U Kannada	31	-29	-16	-11	-91
Udupi	37	-50	-17	3	-88						
NI Karnataka-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	NI Karnataka-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Bijapur	-4	-30	-59	-97	100	Koppal	-16	-1	-50	-78	-99
SI Karnataka-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08						
Bangalore R	71	-25	-2	182	150	SI Karnataka-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Bangalore U	145	13	47	258	79	Kodagu	191	25	15	-42	-51
Chamarajnagar	101	-60	12	-28	296	Kolar	103	-43	28	13	84
Chickmagalur	149	8	30	-1	-93	Mandya	110	-64	61	38	119
Chitradurga	51	-10	7	-14	33	Mysore	162	-33	8	-40	107
Tumkur	145	-35	47	79	286	Shimoga	102	-14	6	-3	-93
Tamil Nadu-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Tamil Nadu-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Chennai	-47	-69	-75	**	-77	Pudukottai	-68	-97	-94	**	157
Coimbatore	777	253	648	**	306	Ramanathapuram	-41	-95	-100	**	304
Cuddalore	-20	106	-99	**	17	Salem	-5	-49	23	**	128
Dharmapuri	-37	-81	109	**	196	Sivaganga	5	-47	-100	**	131
Dindigul	-53	-39	-84	**	356	Thanjavur	-56	-70	-91	**	19
Erode	-86	-100	-39	**	294	Theni	792	71	384	**	377
Kanchipuram	-38	**	-76	**	-65	Tirunelveli	386	-73	496	**	339
Kanyakumari	550	-72	179	**	-71	Tiruvallur	23	-85	-65	**	-44
Karur	-99	-93	-99	**	134	Tiruvannamalai	-57	-32	-93	**	-67
Krishnagiri	-26	-27	-22	**	74	Tiruvarur	-82	-66	-91	**	26
Madurai	-94	-79	-100	**	261	Trichy	-100	-100	-99	**	105
Nagapattinam	-81	19	-85	**	-28	Tuticorin	-100	-100	-100	**	184
Namakkal	-67	-92	-66	**	173	Vellore	-46	-68	-42	**	-93
Nilgiris	137	-27	52	**	35	Villupuram	-54	-55	-92	**	-66
Perambalur	-99	**	-100	**	-22	Virudhunagar	-34	-100	-100	**	172
Pondicherry	-95	28	-94	**	-89						

WEST INDIA

Gujarat-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Gujarat-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Ahmedabad	9	154	35	-45	-67	Kheda	34	39	178	-57	-65
Anand	-30	53	98	-62	-82	Mehsana	-23	87	132	-35	10
Banaskantha	-68	143	163	95	-67	Narmada	-59	12	135	-73	-77
Baroda	-7	4	170	-70	-52	Navsari	6	77	355	-43	-78

Broach	-49	-13	129	-76	15	Panchmahal	-2	-18	118	-58	-41
Dahod	-41	-17	99	-61	-31	Patan	-31	218	89	-17	-49
Dangs,	-58	67	333	62	-70	Sabarkantha	35	-13	118	-24	52
DNH & Daman	66	39	279	-19	-80	Surat	-19	52	191	-74	-60
Gandhinagar	-8	93	265	25	-38	Valsad	52	49	343	-3	-84
S&Kutch-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	S&Kutch-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Amreli	184	-37	50	-95	2	Kutch	-47	71	46	-53	-100
Bhavnagar	-23	134	87	-89	36	Porbandara	332	-30	22	-90	-100
Diu	265	-26	242	-94	-81	Rajkot	66	8	78	8	-84
Jamnagar	121	-38	0	-22	-100	Surendranagar	-31	90	92	-12	-38
Junagarh	278	-39	43	-82	-99						
Maharashtra(K/G)-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Maharashtra(K/G)-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Goa	7	29	305	58	-87	Ratnagiri	49	8	110	-40	-68
Mumbai	245	-24	107	-36	-38	Sindhudurg	44	36	252	-28	-78
Raigad	90	-11	152	-25	-75	Thane	87	5	210	-34	-62
M'Maharashtra-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	M'Maharashtra-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Ahmednagar	96	63	76	-92	-14	Nasik	102	74	711	45	-66
Kolhapur	53	43	312	22	-85	Satara	-35	12	195	-31	-83
						Sholapur	120	78	-34	-67	56
Marathwada-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Marathwada-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
						Usmanabad	40	125	-37	-88	-42
E.Rajasthan-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	E.Rajasthan-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Bharatpur	-59	-38	-6	33	-84	Karauli	-71	77	-55	-20	-31
Chittorgarh	53	37	105	-97	-51	Udaipur	160	22	79	-99	-30
Dausa	-35	83	-51	-40	-48	Dungarpur	109	-54	22	-96	-45
Dholpur	-37	5	9	-6	-89						

CENTRAL INDIA

Chhattisgarh-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Chhattisgarh-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Bastar	**	2	-6	-24	-59	Kowardna	**	-39	1	13	-13
Bilaspur	**	-48	-14	-19	-13	Korba	**	-39	-1	84	-55
Dantewara	**	52	12	-85	-85	Koriya	**	-98	-24	-77	-74
Durg	**	74	-9	-57	-69	Mahasumund	**	-84	-20	-53	-2
Janjgir	**	-37	5	83	4	Raigarh	**	-71	-13	159	62
Jashpurnagar	**	-56	-11	106	-78	Raipur	**	-6	-7	-16	-53
Surguja	**	-93	2	26	-38	Rajandgaon	**	48	-34	-39	-75
E.M.P.-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	E.M.P.-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Balaghat	**	91	-91	-66	-54	Panna	**	-98	**	18	-85
Chhatrapur	**	-6	-100	9	-68	Rewa	**	-87	-100	58	-92

Chindwara	**	1	-55	-83	-86	Satna	**	-93	-100	75	-99
Dindori	**	22	-96	-62	-64	Shahdol	**	-61	**	-81	-1
Katni	**	-60	**	-6	-96	Sidhi	**	**	-36	-22	-77
Mandla	**	65	-30	-85	8	Tikamgarh	**	12	264	-41	-55
						Umaria	**	-75	-100	-49	-62
W.M.P.-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	W.M.P.-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Badwani	**	-79	**	-84	-100	Khargone	**	-72	-67	-86	-49
Bhind	**	73	1	-2	32	Morena	**	1	-19	-18	-57
Bhopal	**	6	27	-97	-79	Neemuch	**	-7	8	-63	3
Datia	**	-49	-63	-9	-94	Raisen	**	65	-79	-85	-53
Dewas	**	-24	59	-88	-40	Shajapur	**	-85	-56	-96	-6
Dhar	**	-79	53	-82	-65	Shivpuri	**	34	-26	-26	-83
Gwalior	**	19	-12	-39	-30	Jhabua	**	-65	61	-84	-47
Indore	**	-24	-71	-98	-16						
Vidarbha-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08	Vidarbha-Districts	30.07.08	06.08.08	13.08.08	20.08.08	27.08.08
Bhandara	68	42	-7	-63	-59	Gondia	70	104	11	-67	-69
Chandrapur	73	169	16	-78	-61	Nagpur	190	23	-4	-77	-42
Gadchiroli	60	132	-11	-71	-44	Wardha	200	49	-16	-73	-69
Yeotmal	4	34	-5	-70	-42	Washim	21	-38	-31	-97	-44

Annexure II

Contingent planning for North Interior Karnataka:

Sowing of the following crops can be taken up during August second fortnight as and when sufficient rainfall is received.

- Sunflower, navane, horse gram and fodder maize and bajra in red soils and shallow black soils.
- Sunflower, cotton and fodder maize and fodder bajra in medium to deep black soils.
- Soil and water conservation measures (compartmental bunding, contour bunds, repeated harrowing etc) may be followed.

If kharif crops could not be taken, priority should be given to undertake planting of fodder crops during rabi crops.