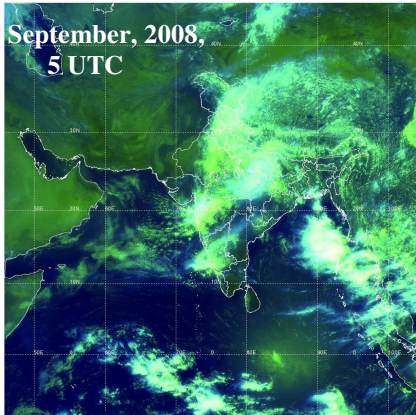




National Agromet Advisory Bulletin

Thursday, 18th September, 2008

(For the period 18th to 22nd September, 2008)



Due to heavy rainfall during last few days flood situation occurred in some parts of Surendranagar, Ahmedabad, Amreli and Rajkot districts in Gujarat. Farmers are advised to drain out water from the crop fields

There are reports of flood situation in Orissa due to heavy rainfall in lower catchments of Mahanadi river. Vast areas in Cuttack, Puri, Jagatsinghpur, Kendrapara and Bhadrak districts is likely to submerge because of release of flood water from dam. Extensive drainage operation from the crop fields has been recommended.

(Detail advisory for Gujarat and Orissa is on page no. 21 & 15 respectively)

Due to receding of flood water, crop situation in North Bihar is improving. Provide drainage facilities in the already sown crops and regular agricultural operations may be continued in this part of the State. In areas, where the flood water is receding, farmers may go for sowing of early potato, wheat and lentil. The detailed contingency plan is given below for flood affected areas.

1. Where flood water recedes by mid September: The old seedlings (30-40 days) of paddy may be uprooted and transplanted again at a 10 x 10 cm spacing using 4-5 seedlings per hill with a NPK @ 40-40-20 kg per hectare. Kulthi can also be sown as an alternate crop.
2. Where flood water recedes by 30th September: From third week of September onwards in uplands toria can be sown @ 5 kg per hectare on 30 x 10 cm spacing. In medium lands, rabi crops like gram, lentil etc. and fodder maize, berseem, fodder jowar can also be sown. In sandy soils, vegetable crops like radish, palak, methi, while in medium textured soils, cabbage, turnip, carrot etc. can be sown.
3. Where flood water recedes from 1st October onwards: The low lying areas may remain wet for a long time and therefore, Rabi sowing of wheat may be taken up with zero tillage machines. Likewise, lentil can also be sown with such machines. In upland areas with irrigation water available, vegetables, rabi maize, potato, onion, sweet potato, mustard etc. can be taken up.


Issued by


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


The bulletin is also displayed in the website (<http://www.imdagrimet.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				
	20 th August	27 th August	3 rd September	10 th September	17 th September
A & N Islands	-55	0	-46	5	63
Arunachal Pradesh	20	-10	61	-13	-88
Assam and Meghalaya	15	-15	121	-13	-55
NNMT	-23	-16	26	-23	-26
SH West Bengal & Sikkim	73	-3	143	17	-67
Gangetic West Bengal	21	-77	-1	8	13
Orissa	9	6	-49	11	160
Jharkhand	49	-62	-54	-4	6
Bihar	101	-59	45	15	-81
East Uttar Pradesh	90	-49	-74	20	-89
West Uttar Pradesh	59	-57	-89	14	-34
Uttaranchal	19	06	-78	-5	-81
Haryana, Chandigarh and Delhi	9	-19	-86	5	-75
Punjab	92	-83	-53	26	-97
Himachal Pradesh	48	-35	-73	-10	-93
J & K	21	-1	-67	11	-64
West Rajasthan	3	-19	-99	8	9
East Rajasthan	-55	-69	-89	-10	88
West M. P.	-78	-58	-94	-23	-21
East M. P.	-50	-63	-71	-13	-74
Gujarat region	-32	-46	-91	-14	234
Saurashtra & Kutch	-49	-68	-94	-25	893
Konkan and Goa	-25	-71	-81	0	323
Madhya Maharashtra	-40	-54	91	-1	263
Marathwada	-79	-62	10	-25	206
Vidarbha	-74	-49	-57	-19	12
Chhattisgarh	-4	-49	-44	-12	-46
Coastal A. P.	47	-17	-71	14	63
Telangana	-11	-42	-65	8	95
Rayalseema	0	46	89	29	-86
TamilNadu & Pondicherry	148	75	49	33	-85
Coastal Karnataka	-9	-90	-62	-17	141
N. I. Karnataka	-63	-51	91	0	-10
S. I. Karnataka	-2	2	281	25	-17
Kerala	-57	-78	70	-22	92
Lakshadweep	4	-23	295	7	-92


The sub divisions like West Madhya Pradesh received scanty / deficient rain in last 5 weeks; East Madhya Pradesh, Saurashtra & Kutch at least 4 out of last 5 weeks; Nagaland, Manipur, Mizoram, Tripura, Himachal Pradesh, Uttar Pradesh, Punjab, Himachal Pradesh, East Rajasthan, Gujarat, Konkon & Goa, Marathwada, Vidarbha, Chhattisgarh, and Kerala received scanty / deficient rain at least 3 out of last 5 weeks. Other subdivisions received normal or excess rain for at least 3 weeks out of last 5 weeks.


 (20% or more excess rainfall)

 (-60 to -99 % scanty rainfall)

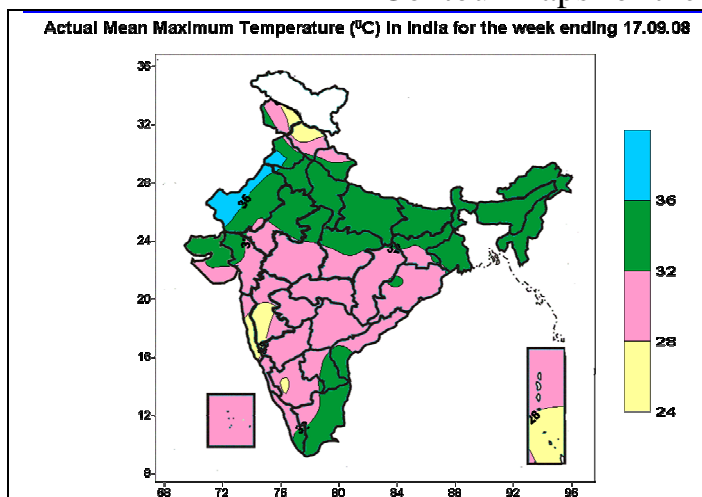
 (-19 to +19% normal rainfall)

 (-100% no rainfall)

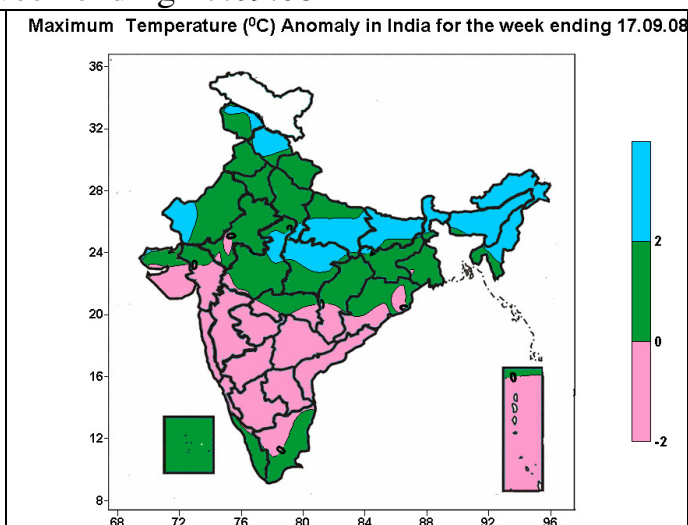
 (-20 to -59% deficient rainfall)

 (** (Data not available)

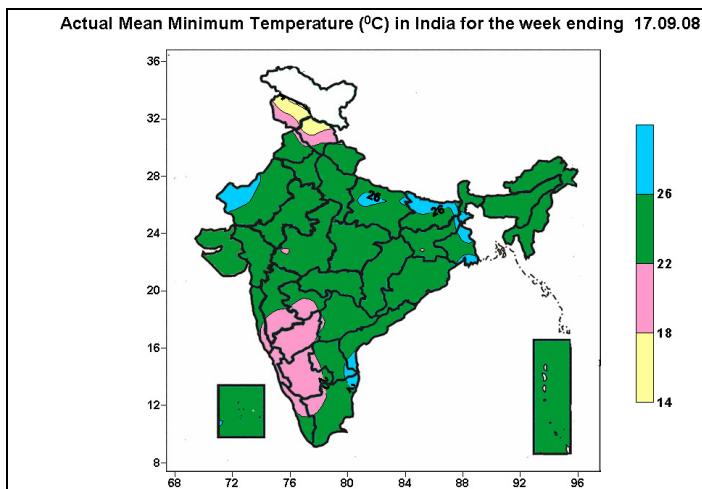
Contour maps for the week ending 17.09.08



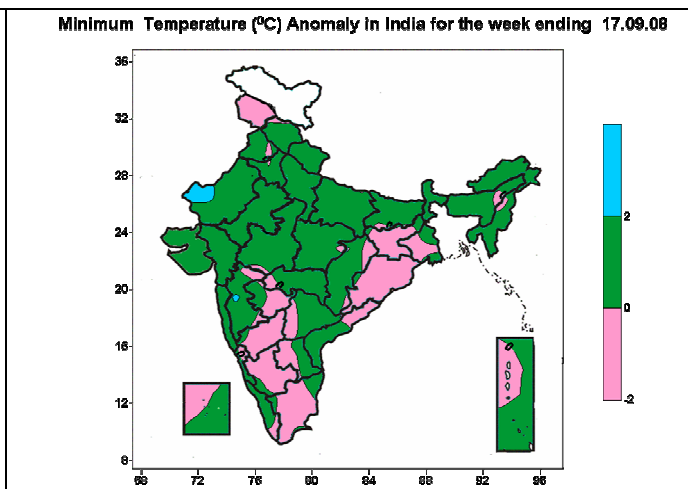
Actual Mean Maximum Temperature ranges between 36 to 40⁰C in some parts of Punjab, West Rajasthan and 32 to 36⁰C over some parts of Jammu & Kashmir, Uttarakhand, Punjab, Rajasthan, Gujarat, Madhya Pradesh, Orissa, Kerala, Tamil Nadu, Rayalaseema, Coastal Andhra Pradesh and most parts of Haryana, Uttar Pradesh, Bihar, Jharkhand, West Bengal and North East India, 24 to 28⁰C in some parts of Jammu & Kashmir, Himachal Pradesh and Konkan & Goa, Madhya Maharashtra, South interior Karnataka, Andaman Nicobar island and 28 to 32⁰C in remaining part of the country.



Maximum Temperature anomaly ranges between 2 to 4⁰C in some parts of Jammu & Kashmir, North Madhya Pradesh, West Rajasthan, most parts of Bihar, Sub Himalayan West Bengal, North East India, -2 to 0⁰C in some parts of East Rajasthan, Orissa, Vidarbha, Chhattisgarh, Tamil Nadu, most parts of Maharashtra, Karnataka and Andhra Pradesh 0 to 2⁰C in remaining parts of the country.

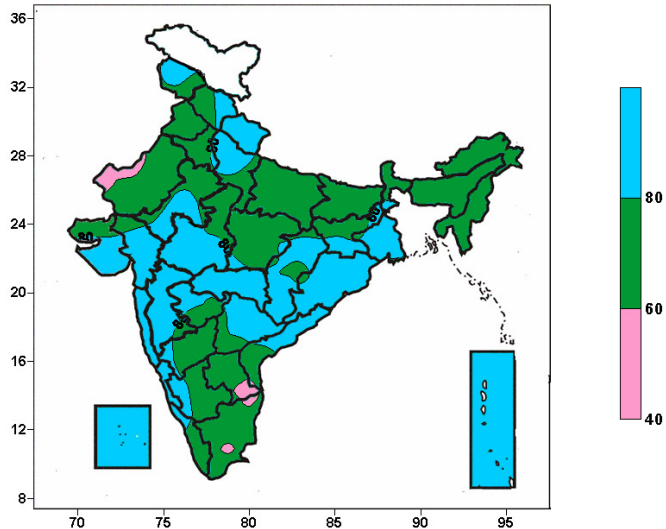


Actual Mean Minimum Temperature ranges between 26 to 30⁰C in some parts of East Rajasthan, West Uttar Pradesh, Bihar, West Bengal and Coastal Andhra Pradesh 18 to 22⁰C in some parts of Jammu & Kashmir and Himachal Pradesh South Maharashtra, Interior Karnataka, 14 to 18⁰C in some parts of Jammu & Kashmir and Himachal Pradesh and 22 to 26⁰C in remaining parts of the country.



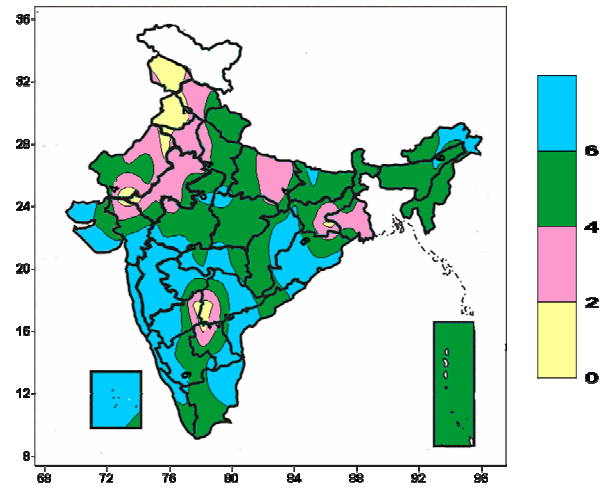
Minimum Temperature anomaly ranges between 2 to 4⁰C over some parts of East Rajasthan -2 to 0⁰C over some parts of Jammu & Kashmir, Punjab, Chattisgarh, Assam, Coastal Andhra Pradesh, Telangana, Kerala, Lakshadweep, Andaman & Nicobar Islands most parts of Jharkhand, Orissa, Interior Karnataka, Tamil Nadu and 0 to 2⁰C over remaining parts of the country.

Relative Humidity (%) over India for the week ending 17.09.08



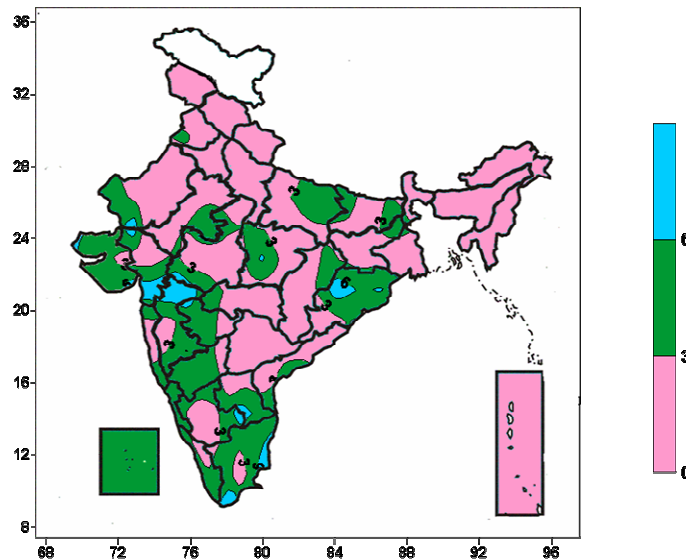
Relative humidity ranges above 80 to 100% in some parts of Jammu & Kashmir, Himachal Pradesh, West Uttar Pradesh, Telangana, Coastal Andhra Pradesh Kerala, most parts of West Bengal, Orissa, Maharashtra, South Gujarat, Coastal Karnataka, Lakshadweep, Andaman & Nicobar Island, 40 to 60% over some parts of West Rajasthan, Rayalaseema and Tamil Nadu and 60 to 80% in remaining part of the country.

Cloud amount (okta) over India for the week ending 17.09.08



Cloud amount ranges between 6 upto 8 okta in some parts of North Madhya Pradesh, Assam Arunachal Pradesh, Bihar, Orissa, West Gujarat, south India, most parts of Maharashtra, Lakshadweep Island and 2 to 4 okta some parts of Uttar Pradesh, Telangana, Rayalaseema, North Interior Karnataka, most parts of Rajasthan, Haryana, and Gangetic West Bengal, 0 to 2 okta in some parts of Jammu & Kashmir, Rajasthan, Gujarat, Telangana, Rayalaseema, North Interior Karnataka, most parts of Punjab and 4 to 6 okta in remaining part of the country.

Wind speed (knots) over India for the week ending 17.09.08









Wind speed ranges between 6 to 9 knots over some parts of South Gujarat region, North Madhya Maharashtra, Orissa, Rayalaseema, Tamil Nadu. 3 to 6 knots over some parts of Punjab, West Rajasthan, Madhya Pradesh, East Uttar Pradesh, Bihar, Jharkhand, Chattisgarh, Orissa, Vidarbha, South Interior Karnataka, coastal Andhra Pradesh most parts of Saurashtra & Kutch, West Madhya Pradesh, Uttar Pradesh, remaining Maharashtra, Orissa, Coastal Andhra Pradesh, Tamil Nadu, Kerala, Lakshadweep and 0 to 3 knots over remaining parts of the country.

Districts experiencing stress condition

*** Most Stress Districts	20/08/08	27/08/08	03/09/08	10/09/08	17/09/08
Arunachal Pradesh					
Changlang	-49	-54	-78	-85	-88
Lower Subansiri	-71	-89	-21	-50	-85
Assam					
Morigaon	-6	-68	-35	-60	-80
Himachal Pradesh					
Bilaspur	123	-71	-38	-29	-94
Kangra	26	-43	-49	-50	-88
Sirmaur	12	-52	-98	-73	-88
Punjab					
Faridkot	-100	-100	-100	-100	-100
Fatehgarh Sahib	-23	-100	-100	-75	-100
Gurdaspur	133	-83	-88	-64	-100
Jalandhar	247	-90	-36	-62	-100
Muktesar	-100	-100	-100	-78	-100
Nawashahar	338	-100	-91	-26	-89
Sangrur	26	-100	-74	-100	-100
Haryana					
Ambala	40	-85	-71	-48	-100
Fatehabad	343	-100	-100	-100	-100
Hissar	-54	-100	-100	-97	-100
Jind	10	-91	-69	-100	-100
Katihah	-34	-100	-70	-85	-100
Karnal	25	-96	-83	-58	-100
Kurukshetra	-31	-100	-86	-91	-100
Panipat	-36	-100	-33	-99	-95
Rewari	-53	-100	-100	-66	-27
Rohtak	-31	-100	-100	-83	-92
Sonepat	90	-100	-29	-85	-27
Yamunanagar	-8	-72	-96	-86	-100
Madhya Pradesh					
East Madhya Pradesh					
Balaghat	-66	-54	-65	-27	-56
Chhatarpur	9	-68	-88	-69	-62
Chindwara	-83	-86	-35	-31	-58
Damoh	-83	-76	-53	-87	-64
Dindori	-62	-64	-94	-63	-100
Jabalpur	-100	-80	-99	-59	-76
Katni	-6	-96	-30	-68	-80
Narsingpur	-86	-21	-87	-92	-54

	20/08/08	27/08/08	03/09/08	10/09/08	17/09/08
Rewa	58	-92	-49	-88	-87
Sagar	-97	-74	-79	-56	-79
Satna	75	-99	-81	-90	-85
Seoni	-88	-81	-72	-47	-77
Sidhi	-22	-77	-70	-100	-90
Tikamgarh	-41	-55	-94	-100	-41
West Madhya Pradesh					
Bhopal	-97	-79	-99	-69	-31
Datia	-9	-94	-90	-90	-30
Guna	-88	-81	-98	-41	-33
Gwalior	-39	-30	-99	-45	-28
Harda	-90	-100	-100	-82	-100
Hosangabad	-93	-88	-85	-55	-80
Raisen	-85	-53	-94	-68	-54
Sehore	-97	-68	-99	-59	-64
Shivpuri	-26	-83	-96	-77	-22
Chhattisgarh					
Durg	-57	-69	-37	-44	-60
Kanker	-75	-75	-90	-46	-88
Korba	13	-55	-75	-74	-72
Koriya	84	-74	-86	-83	-100
Raipur	-16	-53	-30	-31	-23

	(20% or more excess rainfall)		(-60 to -99 % scanty rainfall)
	(-19 to +19% normal rainfall)		(-100% no rainfall)
	(-20 to -59% deficient rainfall)		(Data not available)







*** 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)

East Uttar Pradesh	20/08/08	27/08/08	03/09/08	10/09/08	17/09/08
Allahabad	48	-92	-94	-91	-100
Azamgarh	48	-100	-100	-100	-100
Banda	11	-83	-83	-85	-64
Barabanki	121	-63	-93	-85	-100
Deoria	-74	-100	-100	-68	-94
Hardoi	176	-29	-100	-66	-81
Kanpur City	191	-74	-65	-89	-93
Pratapgarh	-4	-99	-96	-89	-100
RaiBareilly	127	-31	-67	-38	-90
Shrawasti	131	-88	-100	-72	-100
Sitapur	216	-55	-85	-56	-43
Unnao	-99	-77	-94	-79	-97
Varanasi	412	-67	-82	-45	-90
West Uttar Pradesh					
Agra	77	-77	-100	-91	-69
Aligarh	230	-49	-100	-43	-71
Auraiya	145	-35	-100	-100	-98
Bijnor	-17	-83	-100	-79	-99
Firozabad	**	-100	-100	-100	-87
Meerut	-77	-57	-93	-90	-56
Moradabad	44	-57	-100	-82	-80
Uttrakhand					
Dehradun	48	-26	-67	-62	-45
Pithorgarh	-81	-47	-79	-99	-99
Rudraprayag	-31	-62	-52	-60	-42
Bihar					
Aurangabad	30	-82	-97	-96	-89
Bhojpur	89	-73	-39	-30	-100
Buxar	87	-72	-99	-89	-89
Gaya	55	-59	-76	-87	-80
Supaul	-71	-100	-24	-73	-100
Vaishali	95	-41	-64	-32	-96
Jharkhand					
Giridih	69	-88	-38	-92	-8
	20/08/08	27/08/08	03/09/08	10/09/08	17/09/08
Palamau	62	-61	-100	-80	-69
Santhal Parganas	-4	-84	-22	-86	-21
Rajasthan					
East Rajasthan					

Dholpur	-6	-89	-88	-55	-46
West Rajasthan					
Barmer	-100	-100	-100	-100	-31
Churu	-64	-100	-100	-24	-100
Maharashtra					
Vidarbha					
Bhandara	-63	-59	-43	-76	-97
Gondia	-67	-69	-68	-44	-86
Orissa					
Malkangiri	-56	-87	-96	-22	-55
West Bengal					
GWB					
Murshidabad	44	-86	-79	-94	-71

	(20% or more excess rainfall)		(-60 to -99 % scanty rainfall)
	(-19 to +19% normal rainfall)		(-100% no rainfall)
	(-20 to -59% deficient rainfall)		** (Data not available)

- *** 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)

**More Stress Districts	20/08/08	27/08/08	03/09/08	10/09/08	17/09/08
Assam					
Jorhat	-36	1	-36	-72	-83
Himachal Pradesh					
Mandi	8	-13	-65	-55	-77
Shimla	132	20	-86	-23	-99
Punjab					
Moga	28	76	-44	-100	-100
Haryana					
Panchkkula	-63	-15	-96	-82	-90
Madhya Pradesh					
East Madhya Pradesh					
Mandla	-85	8	-83	-34	-62
Shahdol	-81	-1	-81	-77	-88
Chhattisgarh					
Bilaspur	-19	-13	-24	-69	-42
Kowardna	-77	-13	-67	-71	-72
Mahasumund	-53	-2	-83	-62	-87
Surguja	26	-38	-22	-91	-64
East Uttar Pradesh					
Bahraich	91	-5	-88	-68	-75
	20/08/08	27/08/08	03/09/08	10/09/08	17/09/08
Basti	6	8	-73	-55	-97
Gonda	124	76	-56	-100	-95
Kanpur Dehat	39	-1	-97	-30	-96
Kheri	147	-15	-69	-50	-51
Maharajganj	**	**	-85	-92	-88
Uttarakhand					
Almora	-88	4	-100	-100	**
Chamoli	-24	25	-61	-93	-63
Champawat	85	80	-75	-94	-84
Garhwal Tehri	172	-9	-100	-88	-84
Uttarkashi	-15	77	-88	-24	-97
Bihar					
Bhagalpur	75	59	-44	-71	-67
Jharkhand					
Hazaribagh	248	-15	-33	-92	-21
Tamil Nadu					
Tiruvarur	**	26	-26	-63	-100
Andhra Pradesh	Coastal Andhra Pradesh				
Nellore	200	26	-77	-29	-76

	(20% or more excess rainfall)		(-60 to -99 % scanty rainfall)
	(-19 to +19% normal rainfall)		(-100% no rainfall)
	(-20 to -59% deficient rainfall)	**	(Data not available)







*** 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)

*Stress Districts	20/08/08	27/08/08	03/09/08	10/09/08	17/09/08
Arunachal Pradesh					
East Slang	87	153	207	-81	-100
Lohit	11	48	-2	-56	-91
Tirap	72	-27	103	-49	-26
Upper Subansiri	3	-86	81	-49	-100
Assam					
Darrang	-53	-63	280	-56	-79
Dibrugarh	5	2	96	-60	-72
East Garo Hills	109	-90	222	-81	-43
Golghat	49	-58	5	-56	-27
Karimganj	-77	-67	16	-79	-85
Lakhimpur	91	-38	200	-61	-36
Sonitpur	-42	-29	158	-47	-58
Tinsukia	52	33	49	-51	-55
Punjab					
Bhatinda	99	-100	-13	-83	-100
Ferozpur	-79	-100	-2	-68	-100
Kapurthala	603	-35	-16	-100	-100
Madhya Pradesh					
East Madhya Pradesh					
Umaria	-49	-62	-17	-96	-84
Chattisgarh					
Dhamtari	-76	-78	-2	-49	-91
Janjgir	83	4	-16	-48	-93
Jashpurnagar	106	-78	-12	-42	-89
Raigarh	159	62	-8	-83	-53
Uttar Pradesh					
East Uttar Pradesh					
Gazipur	51	-87	-9	-28	-100
Mirzapur	234	-92	-10	-96	-97
Sonbhadra	-34	-78	**	-100	-100
Sultanpur	158	-34	-2	-87	-100
Bihar					
Araria	297	-88	190	-73	-87
Darbhanga	-11	-81	43	-32	-49
East Champaran	189	-44	17	-29	-79
Kathihar	130	-92	23	-78	-79
Khagadia	191	-74	222	-60	-80
Madhubani	55	-93	48	-26	-89
Muzaffarpur	79	3	24	-52	-50
Patna	105	-28	76	-35	-93

	20/08/08	27/08/08	03/09/08	10/09/08	17/09/08
Saharsha	239	-99	150	-39	-81
Samstipur	65	-50	-14	-87	-68
Sitamarhi	96	-53	187	-36	-100
West Champaran	93	-39	23	-31	-96
West Bengal					
GWB					
Birbhum	26	-74	42	-64	-20
Hooghly	5	-98	72	-96	-35
SHWB					
Dinajpur (N)	**	-75	150	-96	**
Kerala					
Thiruvananthapuram	-65	-97	586	-32	-100
Tamil Nadu					
Madurai	**	261	49	-29	-100
Tuticorin	**	184	268	-73	-100

	(20% or more excess rainfall)		(-60 to -99 % scanty rainfall)
	(-19 to +19% normal rainfall)		(-100% no rainfall)
	(-20 to -59% deficient rainfall)		** (Data not available)

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

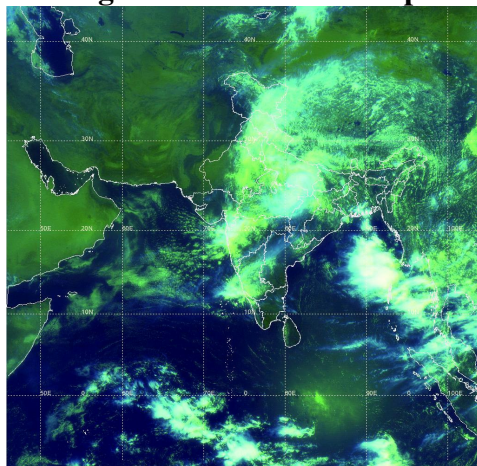
**More stress (3 weeks continuously deficient to no rain)

*Stress (2 weeks continuously deficient to no rain)

Chief Synoptic Feature (Based on 1430 hours IST observations of 18th September, 2008)

- Yesterday's deep depression over north Orissa moved west-northwest wards and lay centered at 0830 hrs IST of today, the 18th September, 2008 over Chhattisgarh, about 50 kms north of Champa. It further moved northwestwards, weakened into a depression and lay centered at 1430 hrs IST of today, the 18th September, 2008 over Chhattisgarh close to Pendra. The system is likely to move northwestwards and weaken gradually.
- Under its influence, rainfall at most places with heavy to very heavy falls at a few places with isolated extremely heavy falls (> 25 cm) are likely over Chhattisgarh during next 24 hours. Rainfall at many places with isolated heavy to very heavy falls is also likely over Vidarbha and Madhya Pradesh during the same period.
- With the likely interaction of above system with mid-tropospheric westerly trough, enhanced rainfall with isolated heavy to very heavy falls likely to commence over west Uttar Pradesh, Haryana, Delhi, Chandigarh, Uttarakhand and Himachal Pradesh during next 48 hours.

Satellite image of 5 UTC on 19th September 08



Zone-wise Forecast

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

(Forecast valid upto 1430 hours IST of 21st September, 2008)

- Rain/thundershowers are likely at a few places over Himachal Pradesh, Haryana, Delhi Uttarakhand and west Uttar Pradesh during next 24 hours and at many places thereafter.
- Isolated rain/thundershowers are likely over Jammu & Kashmir and Punjab during next 24 hours and at a few places thereafter.

Quantitative District Weather Forecast for next five days:

- There is no chance of occurrence of rainfall in Jammu & Kashmir, Punjab and Delhi. Light(< than 10 mm) to rather heavy(45 to 65 mm) /heavy(65 to 85 mm) rainfall will occur in remaining part of the region.

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

(Forecast valid upto 1430 hours IST of 21st September, 2008)

- Rain/thundershowers are likely at many places over Orissa and Jharkhand during next 24 hours and decrease thereafter.
- Rain/thundershowers are likely at a few places over the rest region during next 24 hours and decrease thereafter.

Quantitative District Weather Forecast for next five days:

- In West Bengal and Sikkim light rain will occur while light to rather moderate (25 to 45 mm) rain will occur in rest part of the region

NORTHEAST INDIA [Arunachal Pradesh, NMM & T, Assam, Meghalaya] (Forecast valid upto 1430 hours IST of 21st September, 2008)

- Rain/thundershowers are likely at a few places over Nagaland, Manipur, Mizoram & Tripura.
- 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.

SOUTH INDIA [TN, AP, KERALA, KARNATAKA, LAKSHADWEEP, ANDAMAN & NICOBAR ISLANDS] (Forecast valid upto 1430 hours IST of 21st September, 2008)

- Rain/thundershowers are likely at a few places over coastal Karnataka, Kerala, and Andaman & Nicobar Islands.
- Isolated rain/thundershowers are likely over the rest region.

Quantitative District Weather Forecast for next five days:

- Light to rather moderate rainfall will occur in coastal Andhra Pradesh and light rainfall will occur in rest part of the region.

WEST INDIA [GOA, MAHARASHTRA (OTHER THAN VIDARBHA), GUJARAT, RAJASTHAN] (Forecast valid upto 1430 hours IST of 21st September, 2008)

- Rain/thundershowers are likely at many places over North Konkan, Gujarat region, Madhya Maharashtra during next 24 hours and decrease thereafter.
- Rain/thundershowers are likely at many places over east Rajasthan during next 48 hours and decrease thereafter.
- Isolated rain/thundershowers are likely over the rest region.

Quantitative District Weather Forecast for next five days:

- There is no chance of occurrence of rainfall in many districts of Rajasthan and Saurashtra & Kutch and light to rather moderate rainfall will occur over remaining part of the region.

CENTRAL INDIA [M.P., CHHATTISGARH, VIDARBHA] (Forecast valid upto 1430 hours IST of 21st September, 2008)

- Rain/thundershowers are likely at most places over Chhattisgarh and Vidarbha during next 24 hours and decrease thereafter.
- Rain/thundershowers are likely at many places over Madhya Pradesh during next 48 hours and decrease thereafter.

Quantitative District Weather Forecast for next five days:

- Light to rather moderate rainfall will occur over the region.

Warning:

- Heavy to very heavy falls at few places and extremely heavy falls (> 25 cm) are likely over Chhattisgarh during next 24 hours. Isolated heavy to very heavy falls is also likely over Vidarbha and Madhya Pradesh during the same period next 24 hours.
- Isolated heavy to very heavy rainfall is likely over North Gujarat region and Konkan & Goa during next 24 hours.
- Isolated heavy to very heavy falls likely to commence over west Uttar Pradesh, Haryana, Delhi, Chandigarh, Uttrakhand and Himachal Pradesh during next 48 hours.

Weather Outlook from 1430 IST of 21st to 1430 IST of 23rd September, 2008 (Based on numerical weather products):

- Decrease in rainfall activity is likely over north west India.
- Decrease in rainfall activity is also likely over East India.

Zonewise Agromet Advisories

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

Himachal Pradesh

- **Major Standing crops:** Vegetables (vegetative / flowering / fruiting / harvesting), Maize (cob formation / maturity), Rice (panicle initiation / flowering / grain formation), Apple (fruit development / maturity), Tea (plucking), new planting of evergreen fruit plants.
- As rain / thundershowers are likely at a few places over the State during next 24 hours and at many places thereafter, farmers are advised to postpone irrigation and intercultural operation to the crops.
- Arrange polythene sheets for protection of nursery beds of vegetables against heavy rain and hailstorms in Sub-Montane & Low Hills Sub-Tropical Zone.
- 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:

- Apply plant protection measures to the crops after current spells of rain.
- 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, chloropyriphos 20 EC @ 2.5 ml per litre may be applied if infestation crosses economic threshold level.
- There is chance of occurrence of San Joje Scale in apple. To control the San Joje Scale in apple spray 400 ml Chlorpyriphos (Darmet / Dursban / Massban 20 EC) per 200 liters of water only on the affected plants.
- There is chance of infestation of flower and fruit borer in Pomegranate. For the control of flower and fruit borer in Pomegranate, spray 200 ml spermathrine 10 EC or 200 ml Monocrotophos in 200 liters of water at the interval of 20 days.
- 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.

Animal Husbandry:

- Weather is conducive for spread of foot and mouth disease (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 Diarhiria and cocksedia. Consult the nearby veterinarian under these circumstances.

Uttarakhand

- **Major Standing Crops:** Sugarcane (vegetative), Maize, groundnut and vegetables (vegetative/flowering/early maturity), Rice (vegetative / tillering, grain formation/early maturity in Nainital district), Urd(early vegetative), soybean(flowering/pod formation).
- As rain/thundershowers are likely at a few places over Uttarakhand during next 24 hours and at many places thereafter, postpone irrigation to the crop.
- Farmers are advised to undertake sowing of toria after harvesting of matured rice. Select Pant Toria-30, Pant toria-303 or PT 507 varieties.
- Application of fertilizers and intercultural operation in early sown crops may be carried out after current spells of rain.
- Maintain 3 – 5 cm of water in rice the field.

Punjab

- **Major Standing Crops:** Rice (vegetative), Horticultural crops (vegetative), Sugarcane (vegetative), Early sown cotton (late vegetative/squaring stage), maize, groundnut (early vegetative to late vegetative), and Sunflower (vegetative/flowering).
- As most of the districts received insufficient rain during last few weeks and isolated rain/thundershowers are likely over Punjab during next 24 hours and at few places thereafter, farmers are advised to apply irrigation.
- Farmers are advised to continue sowing of *desi* varieties of radish, peas, potato, palak and late season varieties of cauliflower and planting of fruits crops like sweet orange, lime mango and guava utilizing the rainfall during last week and available irrigation facilities.
- As there are chances of thrips and *pyrilla* incidences in sugarcane, farmers are advised to monitor the crop and need to undertake control measures as the weather is favourable for spraying during next 24 hours and thereafter undertake spraying on a non rainy day.

Haryana

- **Major Standing Crops:** Rice (early vegetative / tillering), Sugarcane (vegetative), Horticulture crops (vegetative), Sunflower (vegetative/flowering), Early sown cotton(late vegetative/squaring stage) and Bajra(vegetative).
- As rainfall is likely to occur at a few places in Haryana for next 24 hours and at many places thereafter, farmers are advised to postpone irrigation and intercultural operations.
- Farmers are advised to continue application of top dressing of urea to bajra after current spells of rain.
- Farmers are advised to continue sowing of *desi* varieties of radish, peas, potato, palak and late season varieties of cauliflower and planting of fruits crops like sweet orange, lime mango and guava utilizing the rainfall during last week and available irrigation facilities.

Delhi

- **Major Standing crops:** Maize (cob formation), arhar (flowering / pod formation), bajra (flowering / grain formation) and fodder sorghum (vegetative), Sugarcane (vegetative), *Kharif* rice (flowering / milk / dough).
- As rain / thundershowers are likely at a few places over the State during next 24 hours and at many places thereafter, postpone irrigation and intercultural operation to the crops.
- As there is chance of rain at many places after 24 hours, farmers are advised to remove excess water from the fields of *kharif* rice and maintain 3 – 5 cm of standing water.
- In view of prevailing weather condition weather condition, farmers are advised to prepare land and undertake sowing of *toria* after current spells of rain.
- Due to possibility of rain during next five days, the farmers are advised to prepare land and sow raddish, turnip and carrot and also prepare nurseries for tomato after current spells of rain. Select varieties from Pusa Deshi, Pusa Rashim etc. for raddish, Pusa Sweta, Pusa Kanchan etc. for turnip and Pusa Kesar, Pusa Mighali etc. for carrot for sowing.

Plant Protection

- There is chance of attack of rice bug in rice due to favourable weather condition. Farmers are advised to arrange for light trap and apply Endosulfan @ 2 ml / litre of water after current spells of rain to control the insect.

Uttar Pradesh

- **Major Standing Crops:** Summer sugarcane (vegetative), Mango trees (fruit setting), Kharif Rice (early vegetative), Kharif pulses and maize (early vegetative).

- As there was insufficient rain in most of the districts during last two weeks and rain/thundershowers are likely at isolated places over East Uttar Pradesh during next three days, apply irrigation to sugarcane and early sown kharif crops. Postpone irrigation in West Uttar Pradesh as there was rainfall in the State and rain/thundershowers are likely at a few places over west Uttar Pradesh during next 24 hours and at many places thereafter.
- Undertake weeding, intercultural operations, application of fertilizers and pesticides in early sown crops like maize, til and urd after current spells of rain in West Uttar Pradesh and continue normal agricultural operations in East Uttar Pradesh.
- Topdressing of recommended amount of Nitrogen in early transplanted rice may be done after current spells of rain in West Uttar Pradesh.
- Prepare field and undertake sowing of toria utilizing the rainfall received during last week.
- 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 rainfall is expected during next 5 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 after current spells of rain in West Uttar Pradesh.

J & K

- **Major Standing Crops:** Pulses (vegetative), Rice (dough stage), Maize (harvesting) in Kashmir division.
- As rain/thundershower are likely at isolated places during next 24 hours and at a few places thereafter, apply irrigation to the standing crops.
- Undertake sowing of turnip in the nursery in Kashmir divisions.
- Undertake thinning in carrot in Kashmir division.
- Undertake sowing of toria, radish (var. Pusa Chetki, Japanese white & Pusa Reshmi), carrot (var. Pusa Kesar), turnip (var. PTWG), garlic (var. local, large segmented), spinach (prickly seeded) and Methi (P.E.B.K.methi) in Jammu division.
- Undertake harvesting of crops like maize and fodder crops and vegetable crops like tomato, cucurbit and capsicum in Kashmir division.

Plant Protection:

- In Jammu weather is congenial for outbreaks of brown spot and blast/ sheath blight in rice, spray the crop with copper oxchloride @ 0.3% or mancozeb @ 0.25% and carbandazim @ 0.1% against the disease brown spot and blast/sheath blight on a non rainy day.
- Present weather is congenial for downy mildew and smut in bajra. Monitor the crops for the pest and diseases. Rogue out downey mildew and smut affected bajra plants and destroy completely to prevent further spread in Jammu region.
- Present weather condition is congenial for white flies and thrips attack in chillies and bhindi crop in Jammu. Spray Malathion @ 0.05% or Endosulfan 35EC @ 0.07% on a non rainy day.
- Weather is congenial for mild incidences of canker in citrus. Monitor the citrus trees and collect and destroy the affected fruits and spray Terramycin @ 1 g/10 litre of water on a non rainy day to control the disease.

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

Bihar

- **Major Standing Crops:** Sugarcane (vegetative), *Kharif* rice (tillering/flag leaf stage in north Bihar and booting/panicle initiation in south Bihar),Maize (vegetative), Pulses(vegetative)

- **North Bihar:** Due to receding of flood water in some areas, crop situation in North Bihar is improving. Provide drainage facilities in the already sown crops and regular agricultural operations may be continued in this part of the State. In areas, where the flood water is receding, farmers may go for sowing of early potato, wheat and lentil. The detailed contingency plan is given below for flood affected areas.
 4. Where flood water recedes by mid September: The old seedlings (30-40 days) of paddy may be uprooted and transplanted again at a 10 x 10 cm spacing using 4-5 seedlings per hill with a NPK @ 40-40-20 kg per hectare. Kulthi can also be sown as an alternate crop.
 5. Where flood water recedes by 30th September: From third week of September onwards in uplands toria can be sown @ 5 kg per hectare on 30 x10 cm spacing. In medium lands, rabi crops like gram, lentil etc. and fodder maize, berseem, fodder jowar can also be sown. In sandy soils, vegetable crops like radish, palak, methi, while in medium textured soils, cabbage, turnip, carrot etc. can be sown with life saving irrigation.
 6. Where flood water recedes from 1st October onwards: The low lying areas may remain wet for a long time and therefore, Rabi sowing of wheat may be taken up with zero tillage machines. Likewise, lentil can also be sown with such machines. In upland areas with irrigation water available, vegetables, *rabi* maize, potato, onion, sweet potato, mustard etc. can be taken up.
- Due to dry and humid weather the rice crop in north east alluvial plain zone may be affected by some insects like stem borer, leaf roller and swarming cater pillar and disease like blast, bacterial leaf blight and sheath blight. If there is damage of such insects and diseases beyond economic damage, apply Carbofuron in the wet soil @ 25kg/hectare. Similarly in case of attack of blast diseases spray bavistin @ 1-2gm/liter water.
- Undertake intercultural operations, spraying and application of fertilizers in rice, maize, vegetables and pulse crops in north east alluvial zone.
- **South Bihar:** Farmers are advised to carry out intercultural weeding and operations under the prevailing weather condition in South Bihar and as poor rainfall received in Rohtas, Aurangabad, Buxar, Gaya, Patna, Bhagalpur, Banka districts, apply irrigation to rice and maize crops so as to recover from prevailing moisture stress conditions.
- Farmers are advised to prepare nursery beds for sowing of winter tomato, cauliflower and cabbage in south Bihar by taking advantage of realized rainfall during last week and rainfall is also expected during next five days.
- As there was insufficient rainfall in most of the districts during last week and rain/thundershowers are likely at isolated places over the State, apply irrigation to the standing rice, maize, vegetables and pulse crops and undertake intercultural operations, spraying and application of fertilizers in south Bihar alluvial zone.

Jharkhand

- **Major Standing Crops:** *Kharif* rice, arhar and Early sown maize (early vegetative).
- As there was sufficient rainfall in most of the districts during last week and good rainfall are also likely at isolated places over the State for the next three days, postpone irrigation to early sown maize, arhar, urd and vegetables.
- Farmers are advised to undertake transplanting of bringal, tomato, cauliflower with application of organic manure in the fallow upland field as early vegetable crop.
- After weeding of rice, apply 18 kg of urea in midland and 22 kg in low land as top dressing per acre in Saheibganj, Godda, Pakur, Dumka, Deoghar, Jamtara, Giridih, Dhanbad, Kodarma districts and 20 kg urea in midland, 25 kg in lowland per acre in Ranchi, Khunti, Bokaro, Hazaribag Ramgarh, Chatra, Garwah, Palamu, Latehar, Lohardagga, Gumla, Simdega districts and undertake busheshining and topdressing of 25 kg Urea/acre in East Singhbhum, West Singhbhum and Saraikela.
- Undertake intercultural operations, spraying and application of fertilisers in early sown maize, arhar, urd and vegetables.

Orissa

- **Major 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).
- There are reports of flood situation in Orissa due to heavy rainfall in lower catchments of Mahanadi river. Vast areas in Cuttack, Puri, Jagatsinghpur, Kendrapara and Bhadrak districts is likely to submerge because of release of flood water from dam.
- As rain is likely at many places in Orissa along with isolated heavy to very heavy rain over interior Orissa during next 24 hours, postpone irrigation to the standing crops. Provide adequate drainage facilities in Cuttack, Puri, Jagatsinghpur, Kendrapara and Bhadrak districts and also in all the districts of Interior Orissa to avoid waterlogging due to heavy rainfall/flooding.
- 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.
- There is incidence of leaf folder and case worm in paddy in Western central table land zone. Apply Monocrotophos @ 2ml /litre of water or Chloropyrifos @ 2ml /lit of water.
- Postpone application of fertilizers, spaying and undertaking of weeding as rain is likely at many places along with heavy rain in interior Orissa.

West Bengal

- **Major Standing Crops:** Sugarcane (vegetative), jute (maturity / harvesting), *Aus* rice (grain maturity), *aman* rice (tillering / panicle initiation).
- Weather condition is favourable to undertake intercultural operation to keep the fields weed free.
- Drain out water from the fields of *aus* rice 10 – 15 days before harvesting.
- As the weather condition is favourable, Continue transplanting of seedlings and sowing of seeds of winter vegetables like radish, spinach and broccoli etc.
- Under prevailing weather prepare nurseries for cauliflower and capsicum. For cultivation of one bigha of capsicum, two seedbeds (3m x 1m) are sufficient. 50 gm seeds are needed for each seedbed.

Plant Protection:

- In the prevailing weather situation, infestations of fungal leaf spot may be seen in vegetables in New Alluvial Zone. Apply 2.5 gm Dithane M-45 mixed with one litre of water to control the attack.
- Sheath blight disease is now becoming severe in *aman* rice in New Alluvial Zone and there is also more chance of infestation due to favourable weather condition. To prevent the disease apply Carbendazim @ 1 gm or Propiconazole @ 1 ml per litre of water to the standing crop.
- In the prevailing weather situation, infestations of fruit and shoot borer may be noticed in brinjal in New Alluvial Zone. To control brinjal fruit and shoot borer apply Spinosad 45 SC @ 1 ml per litre of water.
- There is chance of attack of blast in *aman* rice in Red Lateritic zone and Coastal saline Zone. For controlling blast farmer friends can spray with carbendazim 50% @ 1gm per litre of water.

Sikkim

- **Major Standing Crops:** Orange (fruiting/harvesting), large cardamom (capsule development / maturity), ginger (late vegetative), maize (harvesting), rice (active tillering).
- As rain/thundershower are likely at isolated places over the State, apply irrigation to orange, large cardamom, ginger and vegetable crops.

- This is proper time for sowing of rabi vegetable crops like cabbage, cauliflower, carrot, Chinese cabbage, knol-khol, garden peas radish, turnip, lettuce, celery, spinach, etc in medium and low hills. Undertake land preparation and sowing of the vegetable crops in the nursery when the temperature is in the range of 15-20°C.
 - During the tillering stage, maintain water level of 3-4 cm in rice fields in medium and high hills to enable maximum tillering.
- Plant Protection:** Chirke and foorkey infected large cardamom 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 oxychlorid @ 3gm/ltr of water may be sprayed to the cardamom plants to protect from fungal diseases.
- Weather conditions are congenial for mild incidences of fruit fly in orange. Monitor the trees and apply Sevin baits to control the pest.
 - 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. Arrange for drainage facilities to prevent rhizome rot during spells of rain

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

Assam

- **Major Standing crops:** Sugarcane (vegetative), arhar (vegetative), already transplanted *sali* rice (early vegetative / tillering), vegetables (sowing / vegetative / flowering / fruiting).
 - Recent flood in Assam caused substantial losses of crops in 16 districts especially *ahu* and *sali* rice, vegetables, jute etc. Kamrup, Dhubri, Goalpara, Dibrugarh, Sonitpur, Nalbari, Barpeta, Lakhimpur, Dhemaji, Morigaon, Nogaon and Dibrugarh are the worst affected districts in the current wave of flood.
 - As most of the districts of the State received rain during last couple of weeks, postpone irrigation to the standing crops. Also arrange for draining out excess water from the fields of flood affected area.
 - Farmers are advised to collect the *sali* rice seeds of the varieties like Disang, Luit, Kapili, IR -50 and Sonamukhi and to go for direct sowing in flood affected areas after receding of flood water. For one bigha land, 7-8 kg seeds are required.
 - Seeds of black gram varieties like T-9, Pant U-19, Saonimah (SB-121) and green gram varieties like T- 44, Pratap, AAU-39 may be sown in the field where *sali* rice is completely damaged during recent flood.
 - This is also proper time for sowing of sesamum, black gram, green gram and toria in other areas. Select recommended varieties like Madhabi, Gauri, Binayak, Punjab Til No-1 etc. for sesamum, T-9, T-27, Pant U-19, T-122 etc. for black gram, T-44, Koper Gaon, ML-56, ML-131 for green gram and TS-27, TS-25 for toria.
 - As weather is favourable, farmers are advised for weeding and topdressing of urea fertilizer in medium and long duration varieties of *Sali* rice at maximum tillering stage. For top dressing, apply 3 kg urea per bigha for high yielding and 1.5 kg per bigha for local tall varieties.
 - Prepare land and sow cauliflower, raddish, brinjal, tomato, knolkhol etc. The varieties of cauliflower like Pusa Ketaki, Pusa Deepali, Early Kuwary etc. can be sown. Select varieties from Pusa Himani, Pusa Deshi etc. for sowing of raddish and Pusa Kranti, Pusa Purple Long, Pusa Purple Round, JC-1, JC-2 etc. for brinjal, Punjab Chhuhara, Punjab Kesri, Sioux, Pusa Ruby, Arka Abha, Arka Alok, Arka Abhijit, BT-1, Bilahi-1, Bilahi-2 for tomato and White Vienna for knolkhol.
- Plant protection:**
- The *sali* rice which is at tillering stage may be infested by Hispa in NorthBank Plain Zone. As local method, farmers may apply cow dung solution (mixed with water) in the main field. As chemical treatment, farmers are advised to apply any one of the insecticides like Dimecron / Phosphomidon / Chloropyrifos @ 2 ml per litre of water.
 - Present weather is favourable for occurrence of blast disease in *sali* rice in Upper Bramhaputra Valley Zone. To control the disease spray Kitazin @ 1 ml / litre of water.

Animal Husbandry:

- The farmers who have not vaccinated their domestic live stocks like cattle, goat and pigs, should vaccinate against Foot and mouth disease as well as anthrax disease. They should not be fed with water submerged rotted grasses and fed with anti worm drugs.

Fishery:

- Fisheries should be well protected with nylon nets in view of flood situation.

Arunachal Pradesh

- **Major Standing crops:** Ginger (rhizome formation), Vegetables (harvesting), Wet seeded rice (flowering/grain formation), Jhum rice (grain formation), Millets (grain formation) and maize (maturity).
- As there was insufficient rainfall in most of the districts during last week and rain/thundershower are likely at isolated places over the State, apply irrigation to the standing maize (cob formation), millet and ginger crops.
- Undertake intercultural operations, application of fertilizers and pesticides in ginger and wet seeded rice.
- Farmers are advised to continue land preparation and sowing of rapeseed & mustard, pea and winter cole vegetables by utilizing the realized rainfall during last week and also rainfall is likely at isolated places over the State.

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

Andhra Pradesh

- **Major Standing Crops:** Sugarcane (grand growth), Rice (transplanting/vegetative), Chillies (vegetative)
- As rain/thundershower are likely at isolated places over the State, apply irrigation to the standing crops.

Coastal AP

Plain Land

- Farmers in Krishna, Guntur and Prakasam districts are advised to complete transplanting of rice (BPT 5204).
- Farmers are advised to complete land preparation and transplanting of chillies in Guntur and Prakasam districts by utilizing monsoon showers.
- Farmers in Srikakulam are advised to start harvesting early sown black gram, green gram, ragi, sesamum and maize crops as conducive weather prevails during these days.
- **Plant Protection:** Due to congenial weather conditions, moderate to severe attack of blast and sheath blight is reported in rice in Srikakulam, Vijayanagaram and Visakappattinam districts. Monitor the crop and undertake plant protection measures to control the diseases.
- Weather conditions are favourable for the attack of BPH and blast in rice in Krishna district. Monitor the crop for the pest and disease and spray Ethephosphos @ 2 ml/litre of water to control BPH and spray Tricyclozole @ 0.6 g/litre of water to control blast.
- Due to waterlogging conditions, incidences of whitefly, red rot and wilt may occur in sugarcane in Krishna district. Monitor the crop and undertake plant protection measures to control the pests and diseases.
- Monitor pulse crops for tobacco caterpillar and bacterial leaf spot. Spray Chlorpyrifos @ 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 Chlorpyrifos/ 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 and also at 20, 40 and 60 days after sowing to control the pests.
- Due to congenial weather, attack of stem borer is reported in maize. Monitor the crop and spray Carbofuran 3G @3 kg/acre.

High Altitude Areas

- Farmers in high altitude regions of Srikakulam, East Godavari, Vijayanagaram, Visakappattinam and Khammam are advised to continue sowing of pulse crops like rajma and niger with a possibility of 40-75 mm of rainfall during next five days.
- **Plant Protection:** Attack of blast is reported in paddy and ragi. Farmers are advised to undertake plant protection measures to control the disease.

Rayalaseema

- Farmers in all the districts are advised to go for intercultural operation in early sown *kharif* crops as conducive weather prevails during these days.
- Farmers in Anantapur and Kurnool are advised to continue transplanting of rice and planting of new orchards (papaya, ber, custard apple, mango and banana).
- **Plant Protection:** Attack of Spodoptera, Heliothis and sucking pests is reported in groundnut in Ananthapur and Cuddappah districts. Farmers are advised to undertake plant protection measures to control the pests.
- Attack of leaf folder in paddy, leaf spot and rust in groundnut and spotted wilt in tomato is reported in Chiththoor district. Farmers are advised to undertake plant protection measures to control the pests and diseases.

Telangana

Farmers in Karimnagar, Nizamabad and Adilabad districts are advised to undertake intercultural operations and application of fertilizers and pesticides in early sown crops.

- **Plant Protection:** Attack of stem borer is reported in rice. Spray Carbofuran @ 10 kg/acre to control the pest.
- Weather conditions are conducive for mild incidences of Spodoptera in soyabean in Adilabad. Monitor the crop for the pests and undertake plant protection measures to control the pest.
- Weather conditions are congenial for the attack of mealy bug in cotton. Monitor the crops for the pests and spray Dichlorvas @ 1 ml/litre of water to control the pest.

Karnataka

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

Coastal Karnataka

- As there was excess rainfall during last week and also with a possibility of 35-40 mm rainfall in the next five days, farmers in Udupi, Uttar Kannada and Dakshin Kannada are advised to postpone irrigation to plantation crops (arecanut, coconut, cashew and banana)
- Farmers in Udupi and Dakshin Kannada districts are advised to undertake intercultural operations on a non rainy day in early transplanted rice, arecanut, coconut, cashew and banana. Apply second dose of fertilizers (urea, rock phosphate and potash). Apply FYM @ 15-30 kg/tree in addition to fertilizers to plantation crops on a non rainy day.

Plant Protection:

- Due to cloudy weather, leaf folder and case worm may attack rice. Monitor the crop for the pests and undertake plant protection measures on a non rainy day.
- Due to high humidity in Udupi, Uttar Kannada and Dakshin Kannada districts, Colerago may attack arecanut. Monitor the crop and spray Bordeaux mixture @ 1% on a non rainy day.

North Interior Karnataka

- Due to receipt of light rains in Bellary, Bijapur, Bagalkot and Koppal districts during last week and also with a possibility of light rain during next five days, farmers are advised to undertake sowing of sunflower in red soils and shallow black soils. Sunflower and cotton in medium to deep black soils.
- Farmers in Bidar region are advised to undertake sowing of sunflower (till September end), rabi jowar and safflower (September 15th to October 15th), rainfed wheat (October 1st – 15th), irrigated wheat (October 15th to November 15th) and Bengal gram (October and November) with realized rainfall during last week (115mm) and also with a possibility of 20 mm of rainfall during next five days.
- In view of sufficient amount of rainfall received during last week (35 mm) and also with a possibility light rain during next five days, farmers in Gulbarga district are advised to continue sowing of sunflower (KBSH 1, RSH 1, SP 275, SP244 and Darsa Kaveri).

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 disease in chillies is reported in Dharwad district. Also necrosis is noticed in sunflower. 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 1.7 ml Roger or 1.5 ml Metasystox +2.5ml Dicofol per liter of water to control thrips, mites and murda-complex disease in chillies. To control sunflower necrosis, spray Imidachloprid 17.8 S.L @ 0.25 ml or Oxidematon 25 EC @ 1.5 ml per liter of water. Spray chemicals to control the pests and diseases.

- Due to continuous rain, powdery mildew is reported in black gram and green gram. Spray Carbendazim @ 1 g/litre of water. Also sucking pests, leaf eating caterpillar and stem fly are noticed. Spray Monocrotophos @ 1 ml or Dimethoate @ 1.75 ml/liter of water to control the pests and diseases.
- Monitor citrus for canker and spray Streptomycin Sulphate (0.5 g) + Copper oxi-chloride (2g)/liter of water to control the disease.
- Weather conditions are conducive for the attack of sucking pests in early sown Bt cotton in Gulbarga. Monitor the crops and undertake plant protection measures to control the pests.

South Interior Karnataka

- 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 during this month; undertake transplanting of rice (Thella, Hamza, KRH 1, Mangala, Mukthi, Bilimukthi and Rasi) and planting of sugarcane (CO varieties – 419, 62175, 7804, 8371 and 86032) with the canal water.

Animal Husbandry:

- Undertake vaccination against FMD and Anthrax in cattle in Bangalore, Kolar and Tumkur.

Plant Protection:

- Due to cloudy weather conditions in Mysore and Tumkur districts, attack of blast is reported in rice and ragi nursery. Spray Hinosan or Kitacin @ 1 ml/litre of water on a non rainy day to control the disease.
- There are chances of Tikka leaf spot in groundnut, sucking pests like thrips, aphids and white fly in cotton, stem borer in maize, blast in rice and rhizome rot and soft rot in ginger in Shimoga. Farmers are advised to monitor the crops for the pest and disease and spray Carbendazim 2 1 g/litre of water to control rice blast and Tikka leaf spot in groundnut. Spray Emidochloprid @ 0.6gm/ltr of water to control sucking pests in cotton Spray Ridomil MZ @ 2g/litre and Streptocycline @ 0.5g/litre to control rhizome rot and soft rot in ginger

Kerala

- **Major Standing Crops:** *Virippu* rice (grain maturity/harvesting), *Mundakan* rice (nursery) and Plantation crops (Coconut, Arecanut, Pepper and Cashew).
- Rain/thundershowers are likely to occur at a few places for the next three days, farmers are advised to apply irrigation to rice and plantation crops.
- This is proper time for sowing of chillies, brinjal, amaranthus and tomato in the nursery and direct sowing of gourds and bhindi in the main field in Malappuram, Kasargod, Kozhikode and Kannur districts. Undertake land preparation and sowing of the crops with a possibility of good amount of rainfall in the next five days.
- This is proper time for sowing of *mundakan* rice in nursery in Thiruvananthapuram, Thrissur, Malappuram, Kasargod, Kozhikode and Kannur districts. Select among Mangala, Mashurie, H-4 and Karuna (long duration varieties). Select among Matta triveni, Kanjana, Jaya, Athira and Aiswarya (short/medium duration varieties) where water availability is not sufficient to raise long duration rice. Complete harvesting of *virippu* rice.
- Farmers in Malappuram, Kasargod, Kozhikode and Kannur districts are advised to undertake planting of Nendran banana. Undertake intercultural operations and application of fertilizers in plantation crops (coconut, arecanut, pepper and cashew) on a non rainy day.
- Farmers in Thrissur district are advised to undertake sowing of tomato and capsicum with a possibility of good amount of rainfall in the next five days. Select among California, Hungarian wax and Wonder for sowing capsicum.

Plant Protection:

- Weather conditions are favourable for the attack of thrips in rice nursery in Thrissur. Monitor the crop and spray Dimethoate @ 1.7 ml/litre of water on a non rainy day to control thrips.
- Weather conditions are favourable for the attack of stem bleeding in coconut and blight in cashew in Malappuram, Kasargod, Kozhikode and Kannur districts. Spray Calyxin @ 5 ml/litre to control stem bleeding and 1% Bordeaux mixture to control blight. Monitor black pepper for foot rot due to congenial weather. Spray Copper oxy chloride @ 1% to control the disease. Spray chemicals on a non rainy day.
- Attack of mahali disease is reported in arecanut in Thrissur, Malappuram, Kasargod, Kozhikode and Kannur districts. Apply 1% Bordeaux mixture on a non rainy day to control the disease.

Tamilnadu

- **Major Standing Crops :** Rice (*Kuruvai*) (vegetative), Early, Mid Sugarcane (cane development/ maturity stage), Special season sugarcane (grand growth stage) Sorghum (vegetative) Cotton (boll maturity/picking stage)
- Apply irrigation to groundnut, sugarcane and pulse crops as rain/ thundershowers likely at isolated places over the State.
- Undertake intercultural operations and application of fertilizes and pesticides in *Kuruvai* rice in Thanjavur, Trichy, Karur, Nagappattinam and Perambalur districts with a possibility of light rains during next five days.
- Undertake sowing of bhindi, Dolichos, chillies and cowpea in Chennai, Cuddalore, Kanchipuram, Thiruvarur, Thiruvannamalai, Vellore and Villupuram districts using irrigation water.
- Farmers in Namakkal are advised to go for direct sowing of rice with a possibility of light rains in the next five days.
- Farmers in Thirunelveli, Tuticorin and Virudunagar are advised to undertake sowing of chillies in nursery with a possibility of rains in the next five days.

- 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 stem borer, gall midge, thrips, blast and tungro in paddy in Thiruvallur district. Apply Carbofuran @ 12 kg/acre to control the pest and diseases.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT, RAJASTHAN]

Maharashtra

- **Major Standing Crops:** Sugarcane (pre-seasonal) (elongation / cane development), sugarcane (*Suru*) (active growth / elongation), irrigated cotton (squaring in Nasik and Aurangabad divisions and squaring / boll formation in Latur, Amravati and Nagpur divisions), *kharif* groundnut (flowering / pegging in Nasik, pegging in Kolhapur & Pune, vegetative / flowering in other parts of the State), *kharif* cotton (squaring in Nasik and Aurangabad divisions and floral bud initiation / squaring in Ahmednagar district and in Latur, Amravati and Nagpur divisions), *kharif* rice (panicle initiation / flowering / grain formation in Konkan, panicle initiation / flowering in Pune and Kolhapur divisions and active tillering in other parts of the State), soybean (pod maturity / harvesting in Kolhapur and pod formation / pod maturity in other districts), tur (vegetative / branching), sunflower (head formation / flowering), black gram (pod formation / pod maturity) and green gram (pod maturity / harvesting).
- As there was good rain during last week in most of the districts of the State, postpone irrigation to the standing crops. Arrange for draining out of excess water from the crop fields in North Konkan and Vidarbha due to possibility of isolated heavy to very heavy rain during next 24 hours. Also postpone application of fertilizers and plant protection measures in North Konkan, Madhya Maharashtra and Vidarbha under prevailing weather condition.
- In North Konkan, maintain 3 – 5 cm water in *kharif* rice field after draining out excess water.
- The weather is favourable for carrying out intercultural operation in Marathwada and South Konkan to keep the field weed free. Postpone the same in Vidarbha, North Konkan and Madhya Maharashtra due to possibility of rain at most / many places.
- As there is chance of more rain, apply third dose of Nitrogenous fertilizer (440 g Urea / Are) to *kharif* rice and also apply 870 gm Urea per Are in finger millet after current spells of rain in North Konkan. The same may be carried out in South Konkan and in Sub Montane zone on a non rainy day.
- This is proper time for sowing of Rabi *jowar* in Pune, Solapur and Ahmednagar. Select varieties from Maldandi 35-1, RSV-833, Selection-3, Phule Yeshodha & Mauli. Mauli variety gives good result in the medium soil. Sow the crop at 45 x 15 cm distance by double bowl seed drill. Use 10 kg seed per hectare for cultivation.

Plant protection

- Apply plant protection measures after current spells of rain in North Konkan, Madhya Maharashtra and Vidarbha.
- In cotton, there is chance of occurrence of mealy bug, aphids and jassids in Nasik and aphids and jassids in Aurangabad due to favourable weather condition. To control mealy bug in cotton, spray *Verticillium lecanii* 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 aphids & jassids in cotton, spray 5 % Neem extract or 35 % Endosulphan @ 14 ml or 30 % Dimethoate @ 10 ml in 10 litres of water with 10 ml sticker.

- There is chance of infestation of blast in *khariif* rice in Thane, Raigad, Sindhudurga districts and Nagpur and Kolhapur division. For control spray Carbendazim @ 1 g / litre or Copper oxy chloride @ 2.5 g / litre of water with 1 ml sticker.
- Infestation of tobacco caterpillar in soybean is reported in Nagpur, Akola, Wardha, Bhandara, Chandrapur and Gadchiroli districts of Vidarbha. More than 50% of soybean crop in 201444 ha area in Nagpur division has been affected due to tobacco caterpillar infestation. Due to favourable weather condition, there may be more infestation of this insect. Monitor the crop for the pest and spray Chlorpyrifos @ 2 litres / ha.

Gujarat

- **Major Standing Crops:** Sugarcane (cane development), *Khariif* groundnut (pegging / pod formation), *Khariif* cotton (flowering / boll formation), *Khariif* rice (panicle initiation / flowering), other *khariif* crops (vegetative / flowering).
- Due to heavy rainfall during last few days flood situation occurred in some parts of Surendranagar, Jmnnagar, Amreli and Rajkot districts in North Saurashtra region. Cotton crops at boll formation stage may be affected due to heavy rain in these areas. Arrange for draining out excess water from the crop fields in these districts.
- As there was sufficient rain in remaining districts during last week, farmers are advised to postpone irrigation in these districts.
- This is proper time for transplanting of brinjal and chilli in main field. Undertake transplanting operation after current spells of rain.
- In view of isolated heavy to very heavy rain in North Gujarat region, farmers are advised to undertake picking of matured pods of cow pea and green gram to avoid losses due to rain fall.

Plant protection

- Apply plant protection measures to the crops after current spells of rain.
- There is chance of infestation of mealy bug in cotton in North Saurashtra region. 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 in North Saurashtra region. To control the tikka leaf spot farmers are advised to apply chlorothalonil @ 25 gm or hexaconazole @ 5 ml in 10 litre of water.
- There is chance of occurrence of thrips and jassids in cotton and *Heliothis* in non Bt Hirsutam cotton in South Gujarat due to favourable weather condition. In cotton crop Acitamiprid 20 SP @ 2 g or Thiomithoxam 25 WG @ 4 g in 10 liters of water should be sprayed against thrips and jassid infestation. In non Bt Hissutam cotton endosulphan 35 EC @ 20ml or Indoxacarb 15 EC @ 5 ml in 10litres of water should be sprayed for effective control of *Heliothis*.

Animal Husbandry

- Give 200 g common salt dissolved in warm water to cattle for controlling diarrhea and constipation.

Rajasthan

- **Major Standing Crops:** Groundnut, bajra, jowar, maize, sesame, cluster beans, red gram, cotton, vegetables. All the crops are at vegetative stage.

East Rajasthan

- Farmers in Alwar, Bharatpur, Dholpur, Karauli and Sawai Madhepur are advised to complete planting of mango, guava, lime, ber, aonla, pomegranate and karonda etc. with a possibility of good amount of rainfall during next five days.
- This is proper time for sowing of mustard in Alwar, Bharatpur, Dholpur, Karauli and Sawai Madhepur districts with a possibility of good amount of rainfall during next five days. Undertake land preparation and sowing of mustard. Select among Pusa gold, Maya, Vasundhara, PR 15, 45, Bio 902, NRCSB 506, 101 and Varuna.
- This is proper time for sowing of radish (Pusa Rasmi), carrot, mid cauliflower and winter brinjal in Ajmer and Tonk with a possibility of good amount of rainfall during next five days. Undertake land preparation and sowing of the crops. Before sowing treat the seeds with Thiram @ 2.5 gm per kg seeds.
- Undertake field preparation and sowing of rainfed taramira, toria and mustard in Alwar, Tonk, Dausa and Jaipur with a possibility of good amount of rainfall during next five days. Farmers are advised to procure seed, fertilizers and chemical in advance for the sowing of same crops.
- Due to high wind conditions in Udaipur, tie up maize and sorghum to prevent the crop from lodging.
- Vaccinate the cattle to save from infections against FMD 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 after spells of rain.

- 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 after spells of rain.
- 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 after spells of rain 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 after spells of rain and 2-3 times at an interval of 3 days.
- 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 after spells of rain to control the pest.
- Due to congenial weather, there are chances of mild incidences of white fly in soyabean and sucking pests in vegetable crops in Banswara. Spray Dimethoate @ 2 ml/litre of water after spells of rain to control the pests.

West Rajasthan

- Weather condition is conducive for sowing of chillies and other vegetables in Barmer, Churu, Jalore and Jodhpur. Farmers are advised to sow the crops with a possibility of light rains during next five days.
- Undertake sowing of sweet gourd, cucumber, pumpkin, bitter gourd, tinda, tomato and ladies finger in Barmer, Churu, Jalore and Jodhpur with a possibility of light rains during next five days.
- Undertake intercultural operations and application of fertilizers in early sown crops in Barmer, Churu, Jalore and Jodhpur.

Plant Protection: Weather conditions are favourable for mild incidences of leaf eating caterpillar in fruits and vegetable crops in Barmer, Churu, Jalore and Jodhpur. Spray Qunalphos @ 1.5 kg or

Endosulphan @ 4.25 kg/hectre to control the pests. For controlling sucking pests, spray Monocrotophos @ 1 ml/litre of water.

- Weather conditions are favourable for mild incidences of pink boll worm in cotton, green bug in moong and white fly in sugarcane in Sriganaganagar and Hanumangarh. Monitor the crops and undertake plant protection measures to control the pests.

CENTRAL INDIA [M.P., CHHATTISGARH]

Madhya Pradesh

- **Major Standing Crops:** Sugarcane (grand growth), soyabean (vegetative), maize (vegetative), cotton (vegetative) and vegetable crops (nursery/transplanting).
- As rain / thundershower is likely at many places over the state along with heavy to very heavy rainfall at a few places and extremely heavy falls (>25 cm) during next 48 hours, postpone irrigation to the crops. Arrange for drainage facilities to avoid waterlogging conditions due to heavy falls.
- Farmers in Jabalpur, Katni, Panna, Rewa, Satna, Seoni and Sidhi districts are advised to arrange seeds and other inputs for undertaking sowing of rabi crops.
- Prepare land for sowing of lentil in Gird zone covering Morena, Bhind, Gwalior, Shivpuri Guna Sheopur and Ashoknagar districts. Sowing may be undertaken after spells of rain.
- Undertake land preparation and planting of vegetables like mid cauliflower, potato and field pea in Jabalpur, Katni, Panna, Rewa, Satna, Seoni and Sidhi districts and cauliflower in Bhind, Gwalior, Shivpuri Guna Sheopur, Ashoknagar. Also undertake planting of guava, citrus, mango and anola during this period. Planting may be undertaken after spells of rain.
- **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. Create smoke during the night in cattle shade to prevent cattle from mosquitoes and bees.
- **Poultry:** Due to possibility of Coccidiosis in poultry birds in Sehore, maintain sanitation and aeration in the sheds.

Plant Protection: As there is chance of outbreak of sucking pests is increasing in fruits and vegetable crops in Jabhua hills zone, spray Emidachloroprid 0.30-0.35 ml/litre for control in cotton and spray Methyl Dimethon 25 EC 1 ml/litre after spells of rain to control the pest in fruits and vegetable crops. Also pod borer may attack tomato. Monitor the crop and spray Tricophos @ 2 ml/litre of water after spells of rain to control the pest.

- Weather conditions are favourable for leaf eating and sucking pests on Soyabean, black gram and green gram, with grain eating insects in gird zone. For control spray 500 ml of ethyl Parathyon 50 in 500 litre water /ha or sprinkle Methyle Parathyon (2%) powder 15 to 20 Kg /ha after spells of rain.
- 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 after spells of rain to control sucking pests.
- Monitor groundnut for Tikka leaf spot in Khargone, Khandwa and Harda districts. Spray Mancozeb @ 2 g/liter of water after spells of rain. There is chance of attack of semilooper and girdle beetle in soybean. Spray Traizophos 40 EC @ 2 ml/litre of water after spells of rain.
- There is a possibility of stem borer in maize and jowar. Apply Phorate 10 G @ 8-10 granules/plant after spells of rain.

Chattisgarh

- **Major Standing Crops:** Sugarcane (vegetative), Soybean and black gram (flowering / pod formation), groundnut (flowering / pegging), *kharif* rice (panicle initiation / flowering / milk), pigeon pea, green gram and sesame (vegetative / flowering / pod formation).

- As rain / thundershowers are likely at most places along with heavy to very heavy falls at few places and extremely heavy falls (> 25 cm) over Chhattisgarh during next 24 hours, farmers are advised to postpone irrigation and intercultural operation to the crops. Farmers are also advised to arrange for draining out excess water from the fields of standing crops.
- This is proper time to prepare nurseries of tomato, chilli, brinjal and also early varieties of cabbage and cauliflower. This is also proper time for preparation of land and transplanting of tomato, chilli and brinjal if nurseries are ready. As there is chance of heavy to very heavy rain at a few places over the State during next 24 hours, farmers are advised to carry out sowing and transplanting operations after current spells of rain.

Plant protection

- Apply plant protection measures after current spells of rain.
- Incidence of stem borer and rice bug may occur in *kharif* rice due to favourable weather condition, hence it is advised to keep watch over the crop and install light trap for initial control. If the incidence is higher, apply Carbofuron 3 G @ 10 kg / acre.
- Under present weather conditions incidence of blast may occur in rice crop. Hence, it is advised to keep watch over the crops and in case of higher incidence spray Saaf or Beam @ 1 ml/liter of water.