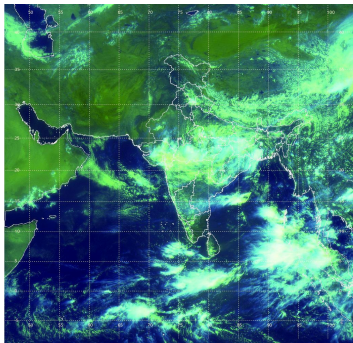




National Agromet Advisory Bulletin

Thursday, 27th August, 2009 (For the period 27th August to 31st August, 2009)



Satellite image 6 UTC Dated
28th August

Chief Synoptic Feature (Based on 1430 hours IST observations of 27th August 2009)

- Fairly widespread rainfall activity with isolated heavy fall is likely over Orissa, south Chhattisgarh and Vidarbha during next 48 hours and decrease thereafter.
- Fairly widespread rainfall activity with isolated heavy to very heavy fall is likely over Madhya Pradesh, Madhya Maharashtra, Gujarat region and Konkan & Goa during next 2-3 days.
- Fairly widespread rainfall activity with isolated heavy to very heavy fall is also likely over northeastern states and west Bengal & Sikkim during next 48 hours.

Salient Agromet Advisories for Farmers

In general most of the States in northeast, east and southern parts received good amount rainfall during last week. This rainfall was beneficial for the standing crops as well as sowing/transplanting of *kharif* crops as well as crops which are at early vegetative stage in these regions. Because of overall improvement of rainfall condition standing crops are in good condition over the major parts of the country. But Himachal Pradesh, Punjab, Haryana, Jammu & Kashmir, Uttar Pradesh, Madhya Pradesh, Rajasthan and Gujarat have not received sufficient rainfall during last week and rain/thundershowers are likely to occur at a few places during next five days. Farmers in these states are advised to apply irrigation to the standing crops.

Andhra Pradesh: As the rainfall was adequate, crops recover from moisture stress. Farmers in Telangana and Rayalaseema are advised to take short duration alternate crop in those areas having sufficient soil moisture. In Rayalaseema farmers are advised to sow of rainfed groundnut and also sow contingent crops like greengram, pearl millet, horsegram, cowpea and sorghum.

Assam: Complete transplanting of *sali* rice. In flood affected areas, drainout the flood water and transplantation of aged seedlings may be transplanted upto mid-September if seedlings of the varieties like Monohar *Sali*, Gitesh, Andrew *Sali*, Prasad Bhog, Prafulla etc. are available. Apply top dressing in early sown *sali* rice. Provide adequate drainage facilities to avoid waterlogging.

Arunachal Pradesh: Postpone irrigation, weeding and intercultural operations. Maintain 3-5 cm standing water in rice field. Water logging in the field must also be avoided. Earthing up may be done after current spells of rain.

Karnataka: Undertake intercultural operations after spells of rain in coastal Karnataka and on a non-rainy day in Interior Karnataka to keep the field weed free.

Madhya Pradesh: Undertake weeding in Soyabean before start of rain / after spells of rain.

Maharashtra : As most of the districts of the State received significant rain during last 4-5 days and rainfall is likely at many places over Konkan, Madhya Maharashtra, Marathwada & Vidarbha during next five days, postpone irrigation to the standing crops and weeding, intercultural operations and top dressing of fertilizers to the standing crops may be carried out after current spells of rain.

Uttar Pradesh: As there was no significant rainfall during last week and rain/thundershowers is likely at many places during next week, apply irrigation to the crops. Undertake weeding, intercultural operations in early sown crops.

Rajasthan: Apply irrigation to the standing crops experiencing moisture stress in west Rajasthan.

Punjab: Irrigation to rice crop may be applied two days after the ponded water has infiltrated into the soil.

Haryana: Farmers are advised to keep the rice field in saturated condition instead of maintaining stagnated water condition. Farmers are advised to conserve moisture.

New Delhi: Raise nursery of mid season cauliflower, cabbage etc.

Himachal Pradesh: Continue transplanting of vegetables and planting of horticulture crops.

Nagaland Manipur Mizoram Tripura: Sow short duration varieties like maize, foxtail millet, sesame, pigeon pea, green gram, black gram.

Sikkim: Water level of 3-4 cm should be maintained in rice field.

Tamil Nadu: Provide mechanical support to prevent banana from lodging due to high winds in Coimbatore and Kanyakumari districts.

Uttarakhand: Continue transplanting of seasonal grasses for fodder to animals.




West Bengal: Undertake transplanting of rice and vegetables.

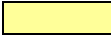


Orissa: Apply top dressing of nitrogen in rice after current spells of rain.

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

Sub-division	Cumulative Rainfall for the period									
	29 th July		5 th August		12 th August		19 th August		26 th August	
	Normal (mm)	% Dep.	Normal (mm)	% Dep.	Normal (mm)	% Dep.	Normal (mm)	% Dep.	Normal (mm)	% Dep.
A & N Islands	95.1	10	87.7	29	107	-65	95.0	-92	87	84
Arunachal Pradesh	141.8	-7	99.2	-1	76	-8	95.3	85	92.4	31
Assam and Meghalaya	125.3	-10	107.3	0	91	-32	95.1	123	114.1	-33
NMMT	76.7	29	71.3	10	71	27	75.2	-32	70.6	43
SH West Bengal & Sikkim	137.6	4	121.6	-16	108	-16	98.6	126	116.5	10
Gangetic West Bengal	68.9	-9	79.6	19	68	12	70.0	-4	64.5	14
Orissa	75.0	-49	91.4	-77	84	-44	89.0	-33	68.8	67
Jharkhand	77.4	-34	81.3	-64	77	-63	72.2	34	67.5	12
Bihar	76.8	34	73.1	-1	65	-18	62.0	92	77.2	-1
East Uttar Pradesh	66.4	10	69.0	-78	74	-67	72.3	58	65.2	-66
West Uttar Pradesh	67.2	-68	63.2	-84	73	-86	73.7	89	56.6	-91
Uttarakhand	103.8	-1	107.6	-78	105	-38	106.3	17	86.8	-74
Haryana, Chandigarh & Delhi	40.3	-34	39.7	-80	42	-92	42.7	-44	35	-78
Punjab	45.3	40	46.7	-14	46	-74	41.7	-49	30.5	-79
Himachal Pradesh	76.6	-22	70.4	-81	69	-40	62.7	-36	52.2	-92
J & K	51.9	-15	53.4	-57	48	-37	36.4	-26	28.9	-52
West Rajasthan	24.4	18	19.4	-99	23	-99	22.5	-70	21.8	-74
East Rajasthan	55.4	-20	52.3	-99	55	-85	56.6	8	53.2	-82
West M. P.	77.1	-1	77.7	-99	75	-72	73.5	-31	62.4	-57
East M. P.	84.1	-70	93.4	-99	95	-62	94.2	-24	73.6	-57
Gujarat region	82.9	49	77.9	-98	74	-94	66.5	-93	51.7	-74
Saurashtra & Kutch	41.6	289	34.2	-99	40	-97	31.2	-91	17.7	-98
Konkan and Goa	232.9	-9	218.7	-85	183	-85	169.2	-70	132.8	-21
Madhya Maharashtra	49.3	32	52.3	-90	44	-81	41.2	-61	30.7	220
Marathwada	54.6	-83	47.8	-99	40	-88	43.8	-75	47.2	176
Vidarbha	74.8	-53	78.2	-99	72	-69	66.6	-72	60.8	52
Chhattisgarh	92.8	-53	96.9	-95	94	-35	92.9	-51	78.6	11
Coastal A. P.	41.3	-93	33.5	-67	34	-59	34.8	41	35.4	17
Telangana	64.9	-92	57.0	-99	49	-79	53.6	-54	46	82
Rayalseema	25.9	-94	21.1	-67	22	-81	19.8	161	23.5	129
TamilNadu & Pondicherry	19.1	-86	14.6	68	18	-76	18.6	218	23.2	-37
Coastal Karnataka	257.4	-39	230.2	-27	205	-66	189.6	-65	146.9	14
N. I. Karnataka	32.7	-82	29.3	-80	24	-77	26.4	37	24.9	269
S. I. Karnataka	48.1	-45	45.6	-3	40	-58	40.2	67	32.7	101
Kerala	157.5	-62	117.7	-22	115	-62	111.7	-58	93.4	-2
Lakshadweep	69.4	-92	45.3	-74	53	-73	49.8	-12	49.5	101

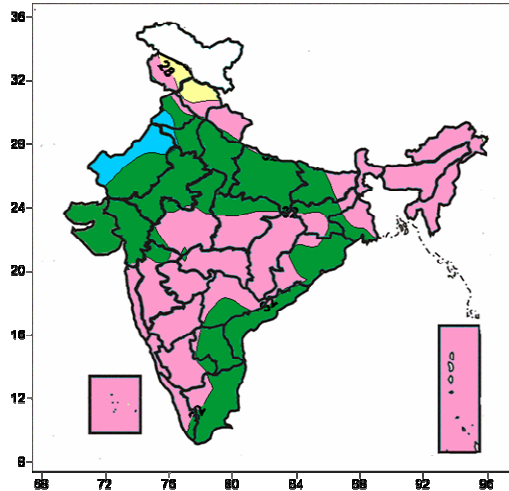
The subdivisions like Haryana, Chandigarh & Delhi, Himachal Pradesh, East Madhya Pradesh received scanty / deficient rain in all the 5 weeks; Orissa, West Uttar Pradesh, Jammu & Kashmir, West Rajasthan, East Rajasthan, West Madhya Pradesh, Gujarat region, Saurashtra & Kutch, Konkan and Goa, Marathwada, Vidarbha, Chhattisgarh, Telangana, Coastal Karnataka, Kerala received scanty / deficient rain in 4 out of last 5 weeks; Jharkhand, East Uttar Pradesh, Uttarakhand, Punjab, Madhya Maharashtra, Coastal Andhra Pradesh, Rayalseema, TamilNadu & Pondicherry, North Interior Karnataka, Lakshadweep received scanty / deficient rain in 3 out of last 5 weeks. Remaining States received normal / excess rain in 2 or more weeks during last 5 weeks.

 (20% or more) excess rainfall
 (-19 to +19%) normal rainfall
 (-20 to -59%) deficient rainfall

 (-60 to -99 %) scanty rainfall
 (-100%) no rainfall
 ** Data not available

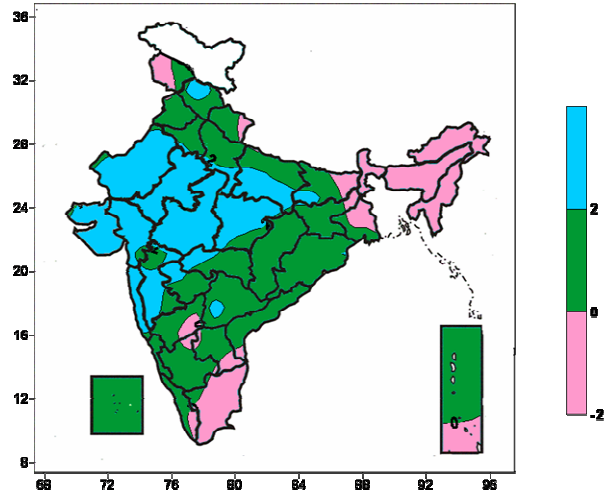
Contour maps for the week ending 26.08.09

Actual Mean Maximum Temperature ($^{\circ}\text{C}$) In India for the week ending 26.8.09



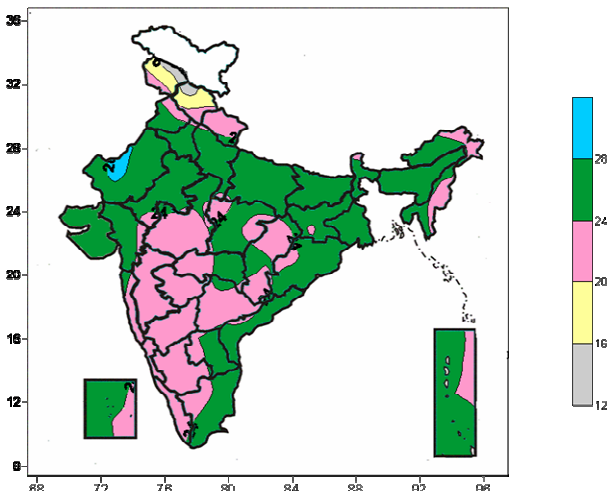
Actual Mean Maximum temperature ranged between 36°C and above over some parts of Punjab, Haryana, West Rajasthan, 32 to 36°C over most parts of Haryana, Punjab, Rajasthan, Uttar Pradesh, Bihar, Orissa, Gujarat, Saurashtra & Kutch, Coastal Andhra Pradesh, Rayalaseema, Coastal Tamil Nadu, some parts of Himachal Pradesh, Jharkhand, Gangetic West Bengal, Madhya Pradesh, Telangana, Madhya Maharashtra, Kerala, South Interior Karnataka, 24 to 28°C over some parts of Jammu & Kashmir, Himachal Pradesh, 28 to 32°C over remaining parts of the country.

Maximum Temperature ($^{\circ}\text{C}$) Anomaly In India for the week ending 26.8.09



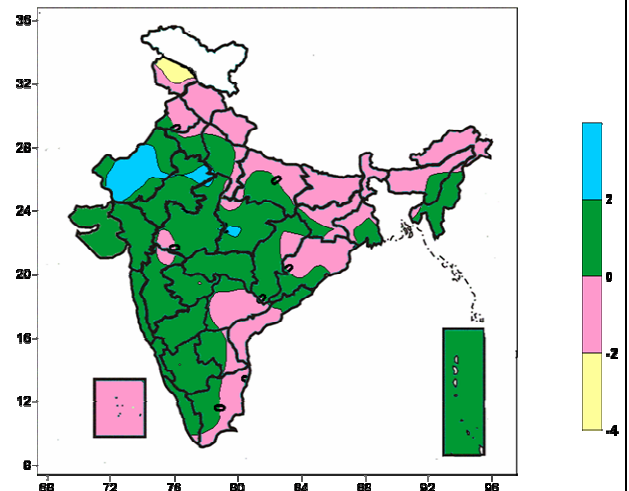
Actual Mean Maximum temperature anomaly ranged between 2°C and above over most parts of Rajasthan, Gujarat, Saurashtra & Kutch, Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, some parts of Himachal Pradesh, Uttar Pradesh, Bihar, Telangana, Marathwada, Vidarbha, -2 to 0°C most parts of Jammu & Kashmir, West Bengal & Sikkim, North East India, Tamil Nadu, some parts of Uttarakhand, Bihar, Jharkhand, Coastal Andhra Pradesh, Raylaseema, North & South Interior Karnataka, Kerala, Andaman & Nicibar Island, 0 to 2°C over remaining parts of the country.

Actual Mean Minimum Temperature ($^{\circ}\text{C}$) In India for the week ending 26.8.09



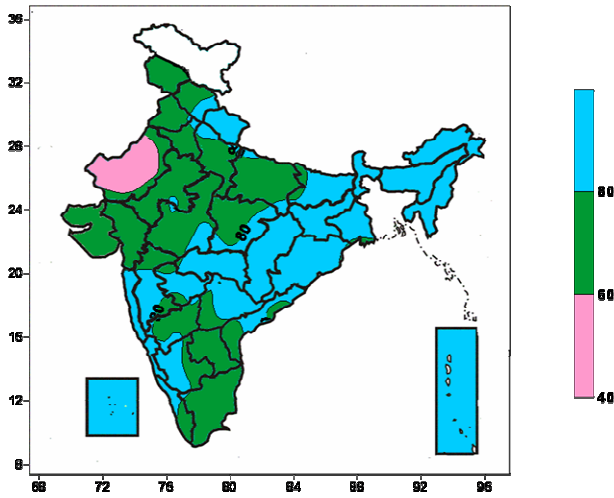
Actual Mean Minimum Temperature ranged between 28°C and above over some parts of West Rajasthan, 24 to 28°C most parts of Haryana, Punjab, Delhi, Uttar Pradesh, West Bengal, Rajasthan, Bihar, Jharkhand, North East India, Orissa, Coastal Andhra Pradesh, Rayalaseema, Coastal Tamil Nadu, Gujarat, Saurashtra & Kutch, Lakshadweep, Andaman Nicobar Islands, some parts of Madhya Pradesh, Chattisgarh, Konkan, Vidarbha, Telangana, 16 to 20°C over some parts of Jammu & Kashmir, Himachal Pradesh, 12 to 16°C over some parts of Jammu & Kashmir, Himachal Pradesh, 20°C to 24°C over remaining parts of the country.

Minimum Temperature ($^{\circ}\text{C}$) Anomaly In India for the week ending 26.8.09

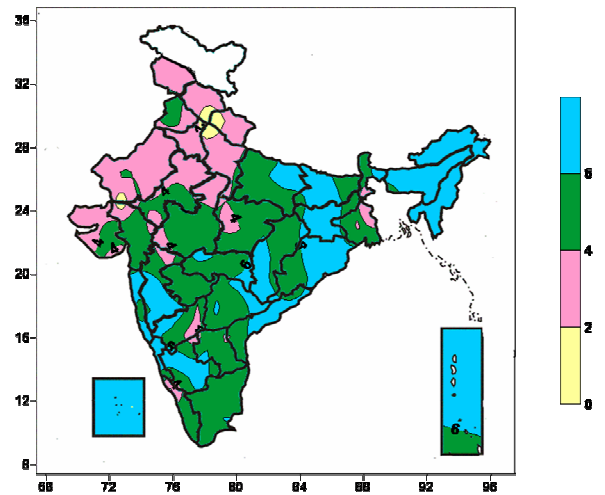


Minimum Temperature anomaly ranged between 2°C and above over some parts of Rajasthan, East Madhya Pradesh, -2 to 0°C over most parts of Himachal Pradesh, Uttarakhand, Punjab, Bihar, Jharkhand, Sub-Himalyan West Bengal & Sikkim, Assam, Arunachal Pradesh, Orissa, Coastal Andhra Pradesh, Telangana, Coastal Tamil Nadu, Lakshadweep Islands, some parts of Jammu & Kashmir, Haryana, Uttar Pradesh, Gangetic West Bengal, Tripura, Rayalaseema, Madhya Maharashtra, Madhya Pradesh, Chattisgarh, -4 to -2°C over some parts of Jammu & Kashmir, 0 to 2°C over remaining parts of the Country.

Relative Humidity (%) over India for the week ending 26.8.09



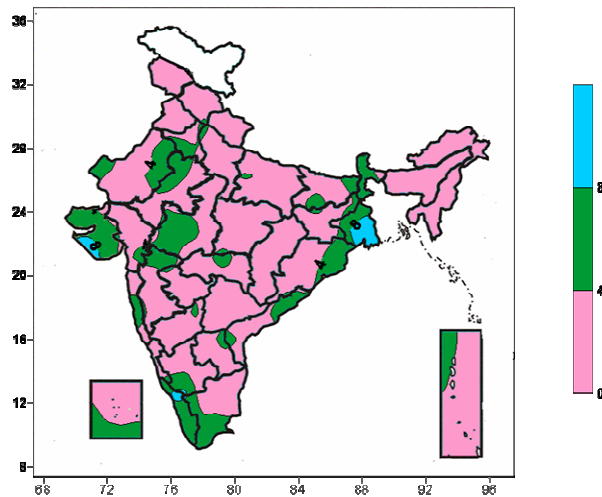
Cloud amount (okta) over India for the week ending 26.8.09



Relative humidity more than 80% over most parts of Uttarakhand, Bihar, Jharkhand, West Bengal & Sikkim, Northeast India, Orissa, Chattisgarh, Maharashtra, Telengana, Coastal & South Interior Karnataka, Lakshadweep, Andaman & Nicobar Islands, some parts of Himachal Pradesh, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Coastal Andhra Pradesh, North Interior Karnataka, Kerala, 40 to 60% over most parts of West Rajasthan, 60 to 80 % over remaining parts of the country.

Cloud amount 6 okta and above over most parts of Northeast India, Bihar, Jharkhand, Orissa, Konkan & Goa, Madhya Maharashtra, Lakshadweep, Andaman & Nicobar Islands, some parts of East Uttar Pradesh, West Bengal, Chattisgarh, Vidarbha, Tamil Nadu, Andhra Pradesh, Karnataka, 2 to 4 okta over most parts of Jammu & Kashmir, Himachal Pradesh, Haryana, Delhi, Uttarakhand, West Uttar Pradesh, Rajasthan, some parts of Punjab, West Bengal, Madhya Maharashtra, Saurashtra & Kutch, Gujarat, Madhya Pradesh, South & North Interior Karnataka, Kerala, 0 to 2 okta over some parts of Himachal Pradesh, Uttarakhand, Punjab, West Uttar Pradesh, West Rajasthan, Gujarat, 4 to 6 okta over remaining parts of the country.

Wind speed (knots) over India for the week ending 26.8.09



Wind speed ranged between 8 knots and above over some parts of, Gangetic West Bengal, Saurashtra & Kutch, Kerala, 4 to 8 knots over most parts of West Bengal, Sikkim, Saurashtra & Kutch, Kerala, some parts of Haryana, Himachal Pradesh, Uttar Pradesh, Bihar, Jharkhand, Rajasthan, Orissa, Gujarat, Maharashtra, Madhya Pradesh, Karnataka, Tamil Nadu, Coastal Andhra Pradesh, Rayalaseema, Lakshadweep, Andaman & Nicobar Islands, 0 to 4 knots over remaining parts of the country.

Zonewise Agromet Advisories

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

Himachal Pradesh

- **Major Kharif Crops:** Rice, Vegetables
- **Crop Stage:** Sowing, transplanting
- **Crop Condition:** Good.
- **Realised Rainfall:** All the districts in the State received scanty rainfall during last week.
- **Rainfall distribution for last 5 weeks**

Himachal Pradesh	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
Chamba	-80	-100	-87	-89	-98
Kinnaur	-60	-98	-92	-61	-98
Kangra	5	-73	-23	-58	-82
Lahaul and Spiti	-68	-97	-97	-27	-98
Sirmaur	-27	-92	-77	-70	-95
Solan	48	-79	-67	-54	-83
Distribution of rainfall for remaining districts of the state for last five weeks					
Bilaspur	167	-37	2	5	-81
Hamirpur	62	-57	43	-13	-92
Kullu	-57	-66	15	98	-82
Mandi	-44	-73	18	-18	-99
Shimla	-35	-90	-32	-16	-98
Una	187	-42	25	22	-99

- **Rainfall Forecast:** Rain/thundershowers at a few places.
- **Advisory:**
 - Transplanting solanaceous vegetable crops may be taken up.
 - Apply irrigation to the standing crops as there was no significant rainfall during last week and rain / thundershowers are likely to occur at a few places.
- **Major Seasonal Crop:** Fruit crops, Flower crops and Vegetables
 - It is optimum time for plantation of evergreen plants like Mango, litchi, guava, citrus, loquat and amla.
 - Undertake weeding, intercultural operations and top dressing of fertilizers on a non rainy day.
 - Farmers are also advised to arrange the staking in vegetable crops to avoid the damage.
- **Plant Protection:** Weather conditions are favourable for mild incidences of –
 - leaf minor in new growth of citrus, spray 10 ml metasystox or malathion 10 ml in 10 litre of water.
 - fruit rot in tomato, chilli and shimla mirchi, spray Dithane M-45 @ 2-3 g per litre of water at 10-15 days interval.
 - white fly in cucurbits, tomato and french bean, for control spray acephate @ 0.05% (7 g/ litres of water) and direct the spray on lower leaves.
 - red spider mites in carnation, for control spray cypermethrin or nuvacron @0.05%.
 - Undertake spraying on a non rainy day.

Uttarakhand

- **Realised Rainfall:** All the districts in the State received deficient / scanty rainfall during last week.
- **Rainfall distribution for last 5 weeks**

Uttarakhand					
State/Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
Chamoli	14	-91	-66	-53	-44
Garhwal Tehri	-62	-90	-75	-79	-98
Rudraprayag	-47	-91	-86	-60	-78
2 weeks continuously deficient to no rain					
Dehradun	27	-63	31	-59	-72

Garhwal Pauri	44	-59	-15	-95	-100
Distribution of rainfall for remaining districts of the state for last five weeks					
Almora	-66	-91	-37	-16	-83
Champawat	-15	-90	26	224	-100
Haridwar	101	-68	-51	78	-100
Nainital	-22	-97	-7	169	-86
Pithoragarh	-17	-57	-12	118	-49
Udham Sing Nagar	-45	-88	-86	74	-93
Uttarkashi	29	-83	-88	-8	-67

- **Rainfall Forecast:** Rain/thundershowers at a few places over the state.
- **Major Kharif Crops:** Rice, Soyabean, Groundnut, Tur, mung, sesame.
- **Crop Stage:** Transplanting
- **Crop Condition:** Good
- **Advisory:**
 - In the rice crop attained age of 65-70 days, top dress Urea @ 25 kg/acre after removing excess water from the field.
 - This week temperature conditions will be highly favourable for growth of Soybean crop. Remove weeds and maintain proper plant distance.
 - **Major Seasonal Crop with stage:** Sugarcane ratoon (early vegetative), cabbage, garlic, tomato (vegetative), maize, French bean (early vegetative),
- **Crop Condition:** Good
- **Advisory:** Apply weeding and intercultural operation after current spells of rain.
 - Undertake planting of mango, litchi, guava, citrus, loquat and amla and sowing of annual flower crops.
 - Continue transplanting of seasonal grasses for fodder to animals. Select local varieties of grasses in bare fields.
 - **Advisory for Plant Protection:** Weather conditions are favourable for mild incidences of –
 - khaira disease in rice in valleys, if appears in the crop under irrigation, farmers are advised to spray the solution of 5 kg zink sulphate and 20 kg urea in 1000 litre of water/ per hectare for control of the said disease.
 - Under these weather conditions, BLB is expected to occur in some varieties of rice like PD-4 & Pusa Basmati-1. On seeing the symptoms of light yellow to white spots on leaves as more than 10 %, then farmers are advised to spray 200 g Blightox-50 & 6g streptocycline dissolved in 200 litres of water per acre. Remove excess water & stop top dressing.
 - For control of Yellow Mosaic disease in timely sown moong & urd crop, spray 400 ml of Metsystox-25 dissolved in 400 litres of water per acre crop.
 - leaf folder in timely sown tur, spray 2 ml of Monochrotophos dissolved per litre of water.
 - Undertake spraying of pesticides on a non rainy day.
- **Animal:** Give balanced feed to milking animals and clean properly their place of sitting in this rainy season.

Punjab

- **Realised Rainfall:** All the districts in the State received deficient/scanty rainfall during last week.
- **Rainfall distribution for last 5 weeks**

Punjab	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
Amritsar	-52	-92	-100	-52	-72
Bhatinda	-22	-21	-100	-92	-69
Fatehgarh Saheb	-76	-68	-100	-81	-100
Ferozpur	-72	-75	-100	-80	-97
Hoshiarpur	190	-51	-28	-62	-91
Muktesar	-84	-26	-100	-81	-38
Sangrur	49	-55	-97	-97	-84
3 weeks continuously deficient to no rain					
Faridkot	-100	147	-100	-100	-100

Ludhiana	136	91	-95	-46	-55
Moga	-17	-6	-95	-62	-100
2 weeks continuously deficient to no rain					
Ropar	63	-36	-6	-20	-88
Kapurthala	226	-21	130	-65	-86
Distribution of rainfall for remaining districts of the state for last five weeks					
Gurdaspur	-13	11	-62	-14	-96
Jalandhar	245	113	-72	27	-39
Nawashahar	54	100	-68	-9	-91
Patiala	34	-6	-100	-13	-66

- **Rainfall Forecast:** Rain/thundershowers at a few places over the state.
- **Major Kharif Crops:** Rice, maize, guar, til, urd, bajra, cowpea, cotton
- **Crop Stage:** Sowing/ Early vegetative
- **Crop Condition:** Rice crop is in satisfactory condition.
- **Advisory:** As there was no significant rainfall in most of the districts of the State and rain / thundershowers are likely to occur at a few places, apply irrigation to rice crop two days after the pounded water has infiltrated into the soil in the districts received relatively less rainfall but the rice fields should not be allowed to develop cracks. Last dose of nitrogen through 35-40 kg urea may be applied, if already not given. In case of iron deficiency, spray 1 per cent ferrous sulphate solution 2-3 times at weekly intervals. Sowing of maize varieties viz. PMH 2, JH 3459 and Parkash can be done during this time by keeping row to row distance 60 cm and plant to plant distance 15-20 cm after seed treatment with Bavistin @3g/kg seed.
- Timely sown early maturing Bt hybrids such as MRC-7017, MRC-6304 have started boll opening. Farmers are advised to pick the fully open bolls to avoid their quality deterioration and also further hastening the opening of full mature bolls. Long duration Bt hybrids such as RCH-134 has started flowering. Therefore, Potassium Nitrate (13:0:45) @ 2kg/acre should be given at weekly intervals to minimize flower drop and improve the boll number and their quality.
- **Major Seasonal Crop with stage:** Sugarcane and Vegetables
- **Advisory:** Undertake weeding, intercultural operations in sugarcane and cotton on a non rainy day.
 - Start sowing of radish, cauliflower using 250 g seed of mid season varieties like Punjab Giant 26 and Giant Snow Ball in one marla bed area and planting of *kharif* onion both with bulbsets as well as seedlings where adequate rainfall received.
 - Undertake sowing of non-legume fodders in mixture with legume fodders like maize + cowpea, sorghum + guara.
 - Farmers are advised to apply irrigation to the standing crops as there was no significant rainfall in many of the districts during last week.
- **Advisory for Plant Protection:** Weather conditions are favourable for mild incidences of –
 - rice hispa and leaf folder in rice, spray Monocil @ 560 ml or Chlorpyrifos @ 1000 ml by dissolving in 100 lts. of water per acre.
 - tobacco caterpillar on early crop of cauliflower, apply 200-400 ml Endosulfan 25 EC in 80-100 litre of water per acre. Repeat at 10 days interval as per requirement.
 - tigrid bug and thrips on marigold, apply Endosulfan 35 EC @ 3-4 ml/litre of water to check the damage.
 - Spray chemicals on a non rainy.
- **Animal Husbandry:** Feed the animals and birds during the cooler hours of the day. Vaccinate the animals against FMD and HS disease. Feed the animals during cooler hours i.e. early morning and evening hours. Provide and green fodder during night also. Increase the dose of mineral mixture and oil seed cakes in the ration. Provide clean & fresh water in plenty. Take care of animals during these days as due to humid weather, lice and ticks can cause skin irritation and spread diseases.

Haryana

- **Realised Rainfall:** All the districts in the State received deficient/scanty rainfall during last week.
- **Rainfall distribution for last 5 weeks**

State / Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
Bhiwani	-62	-88	-100	-85	-33
Chandigarh	94	-29	-99	-47	-98
Fatehabad	-87	-84	-100	-88	-48
Hissar	-58	-94	-100	-82	-100
Jhajar	18	-82	-100	-53	-83
Jind	23	-84	-94	-87	-58
Karnal	-50	-66	-100	-24	-92
Mahendragarh	-75	-100	-95	-25	-74
Panchkkula	-33	-82	-83	-72	-96
Panipat	-72	-100	-94	-57	-93
Rewari	-98	-100	-100	-83	-80
Rohtak	-26	-99	-100	-60	-92
Sirsa	-92	-100	-100	-78	-83
Sonepat	59	-71	-97	-75	-96
3 weeks continuously deficient to no rain					
Katihah	-38	-14	-100	-89	-86
Kurukshetra	-74	-12	-100	-71	-94
Distribution of rainfall for remaining districts of the state for last five weeks					
Ambala	14	-74	-86	-14	-93
Faridabad	-61	-97	-100	71	-74
Gurgaon	-46	-96	-93	-16	-55
Yamunanagar	-45	-64	-53	64	-98

- **Rainfall Forecast:** Rain/thundershowers at a few places over the State.
- **Major Kharif Crops:** Rice, maize, guar, bajra, cotton
- **Crop Stage:** Sowing/ transplanting
- **Crop Condition:** Sowing should be completed utilizing the realized rainfall. Sowing of Bajra, Pulses and Jowar is continued.
- **Advisory:** Farmers are advised to keep the rice field in saturated condition instead of maintaining stagnated water condition. Farmers are advised to undertake hoeing and reduce the plant population in the crop under dryland conditions and use the harvested plant as green fodder. Apply 35 kg Urea per acre in rainfed bajra crop if rain is there; and not applied earlier.
- Farmers are advised to conserve the moisture in the already sown standing crops by intercultural operations and along with removing excess seedlings in bajra and trash mulching in sugarcane.
- **Major Seasonal Crop with stage:** Spring sugarcane (early vegetative/vegetative), vegetable crops (vegetative), cotton (early vegetative) and berseem (vegetative)
- **Crop Condition:** Good
- **Advisory:**
 - Undertake hoeing and weeding and apply the remaining dose of nitrogen fertilizer to the sugarcane.
 - Farmers are advised to apply irrigation to the standing crops as there was no significant rainfall in most of the districts during last week.
 - Farmers are advised to undertake weeding and hoeing in cotton and intercultural operations in tomato, onion and chilli on a non rainy day.
 - **Advisory for Plant Protection:** Weather conditions are favourable for mild incidences of –
 - jassid in cotton crop, spray the crop with recommended insecticide by the University if there is incidence of jassid on a non rainy day.

Delhi

- **Realised Rainfall:** The State received deficient rainfall during last week.

- **Rainfall distribution for last 5 weeks**

State	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
New Delhi	84	-95	-57	-12	-46

- **Rainfall Forecast:** Rain/thundershowers at a few places over the state.
- **Major Kharif Crops:** Maize, vegetables and rice
- **Crop Stage:** Sowing, transplanting
- **Crop Condition: Satisfactory**
- **Advisory:**
 - In present weather conditions farmers are advised, for sowing of mustard for green vegetable purpose, Recommended cultivar: - Pusa Sag 1. Sowing of spinach and coriander can be taken up. Intercropping of coriander with sweet corn can be done in raised bed.
 - Intercultural operations are advised to keep the fields free from weeds. Monitoring of white fly is also advised as it is the vector of yellow mosaic virus of pulse crops. If the damage by white fly is more, spraying of Endosulfan 35 EC @ 2-3 ml per litre of water may be done.
 - Manual intercultural operations were advised in paddy crops for removing the weeds. At this stage use of weedicide is not advised. Application of final dose of nitrogen fertilizer should be done.
 - Under present weather conditions earthing up and tying operations of sugarcane is advised.
 - In present weather conditions farmers are advised to start sowing of marigold. Recommended cultivars:- Pusa Narangi and Pusa Basanti. Seeds are available in seed production unit of IARI.

Plant protection:

- Present weather conditions are highly favourable for infection of blast disease in rice. Monitoring at 2-3 days interval is advised. Early symptoms include development of eye shaped spot on the leaf and leaf sheath with light centre and dark boundaries. At a later stage these spots coalesce to form big spots.
- Under present weather conditions, damage by leaf folders in paddy crop is reported by farmers. To control the pest, mechanical methods, such as rope method (to dislodge the larve) is advised. If damage is more, spraying of Chlorpyrifos 20 EC @ 2 ml per litre of water or Fipronil 5 % @ 1 ml per litre of water in a clear day is advised.
- In present weather condition, constant monitoring for brown plant hopper in paddy field is advised. Farmers are advised to enter into the middle of the crop field and see mosquito like insect at the basal portion of the plant. If 10 insects per hill are counted, then spraying of Imidacloprid 17.8 SL (Confidor) @ 1 ml per 4 litre of water pointing the nozzle towards the base of hill is advised.
- Due to humid weather conditions, there may be increase in population of insect pests of cotton. Farmers are advised to install pest specific pheromone traps in the fields. If population is large, spraying of insecticide is advised. Attacks of mealy bugs are also reported in cotton. Spraying of 2 % soap solution and after that spraying of Quinalphos @ 2 %, directing the nozzle of the sprayer towards stems is recommended.
- In brinjal, to control shoot and fruit borer, cutting of the infested dried shoots at 1-1.5 inch below the damaged part and burying them deep in the soil is advised. It is strongly advised not to keep the damaged shoots besides the field as the larvae from damaged shoots or fruits may attack nearby healthy plants. Pheromone traps of this pest are available and can be installed in the field (11 traps /ha).
- To protect the chilli and tomato crops (without flower) against viral diseases, spraying of Imidacloprid 17.8 SL (Confidor) @ 1 ml per four litre of water is advised in a clear day to control the vector white fly.
- **Crop Condition: Good**
 - **Advisory:** Sowing of black gram is advised in those areas where rice crop has failed due to drought like situation. Recommended cultivars: - Pant Urad -9.

- Under the present weather situations, nursery preparation for cauliflower, broccoli and cabbage can be done. Farmers having mature seedlings are advised to go for raised-bed transplanting.
- Sowing of carrot can be done in raised bed. Recommended cultivars: - Pusa Rudhira and Pusa Kesar.
- Present weather conditions are favourable for sowing of short duration vegetable crops, such as radish (Pusa Chetki, Summer long, Summer long Chetki and Versha Kee Rani), spinach (All Green, Pusa Jyoti and Bharati). Seed treatment with Captan @ 2-3 gm per kilogram of seed is advised.
- Transplanting of green onion seedling can be taken up. Sowing should be done in raised bed.
- In present weather conditions farmers are advised, to sow the mustard crop for leafy vegetable purpose. Recommended cultivar: - Pusa Sag-1. Sowing of spinach and coriander can also be taken up.
- Drenching of vegetable nursery with Mancozeb @ 2 grams per litre of water is advised to control damping off.

Uttar Pradesh

- **Realised Rainfall:** In general, most of the districts of the state received deficient/scanty rainfall.
- **Rainfall distribution for last 5 weeks**

State / Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
East Uttar Pradesh					
Allahabad	-57	-95	-85	-58	-90
Ballia	-27	-78	-61	-79	-44
Kushi nagar	-50	-58	-81	-45	-87
Maharajganj	**	-41	-70	-39	-85
Mirzapur	-76	-100	-100	-67	-99
Pratapgarh	55	-91	-89	-27	-94
Sant Ravidas Nagar	-38	-100	-55	-44	-100
Sonbhadra	-8	-100	-95	-61	-92
West Uttar Pradesh					
Baghpat	25	-28	-97	-45	-97
Etawah	-97	-92	-87	**	-83
Firozabad	-84	-100	-20	-20	-100
Mahamaya Nagar	-96	-95	-99	-44	-58
Meerut	-66	-66	-81	-88	-100
Muzzaffarnagar	-90	-60	-98	-91	-91
3 weeks continuously deficient to no rain					
West Uttar Pradesh					
Ghaziabad	-57	-11	-81	-50	-100
2 weeks continuously deficient to no rain					
East Uttar Pradesh					
Deoria	-64	-96	-6	-56	-47
Distribution of rainfall for remaining districts of the state for last five weeks					
East Uttar Pradesh					
Ambedkar Nagar	-11	-80	-69	383	-84
Azamgarh	18	-100	-71	148	-51
Bahraich	27	-32	-34	214	-27
Balrampur	136	-75	49	52	-87
Banda	-94	-97	-91	63	-86
Barabanki	139	-74	-73	23	-7
Basti	15	-72	-71	97	-17
Faizabad	65	-88	-70	216	-15
Farrukhabad	-71	-96	-83	99	-91
Fatehpur	-80	-92	-90	11	-98
Gazipur	-47	-98	12	81	-10
Gonda	47	-79	-73	234	-44

Gorakhpur	46	-77	-32	35	-70
Hardoi	84	-64	-60	117	-55
Jaunpur	45	-93	-87	24	-74
Kanpur City	-84	-97	-85	38	-87
Kanpur Dehat	-98	-89	-68	35	-97
Kheri	-7	-59	-38	186	-42
Lucknow	12	-20	-59	126	-70
Mau	-63	-86	-73	8	-85
RaiBareilly	-13	-86	-98	2	-97
Shrawasti	57	-28	-41	119	21
Sidharthnagar	79	-7	-32	163	-89
Sitapur	66	-73	-82	146	-8
Sultanpur	169	-70	-86	53	-82
Unnao	-22	-73	-78	48	-92
Varanasi	32	-100	-86	6	-98
West Uttar Pradesh					
Agra	-87	-100	-96	-6	-99
Aligarh	-56	-96	-93	19	-75
Auraiya	-99	-90	-74	128	-100
Badaun	-51	-71	-92	256	-94
Bareilly	4	-79	-92	382	-87
Bijnor	-64	-79	-74	175	-99
Bulandsahar	-15	-92	-95	103	-95
Etah	-78	-98	-89	12	-89
Hamirpur	-97	-99	-93	63	-68
Jalaun	-100	-96	-96	11	-94
Jhansi	-99	-100	-96	68	-95
Jotirba Phule Nagar	-84	-44	-100	167	-100
Lalitpur	-94	-100	-73	26	-97
Mainpuri	-98	-100	-61	110	-96
Mathura	-99	-100	-94	90	-89
Moradabad	-68	-92	-93	111	-92
Pilibhit	-4	-71	-78	177	-96
Rampur	-72	-98	-89	71	-99
Saharanpur	-82	-79	-96	191	-92
Shahjahanpur	-34	-80	-63	198	-73

- **Rainfall Forecast:** Rain/thundershowers at a few places over the state.
- **Major Kharif Crops: East UP:** Rice, mung, jowar, bajra.
- **West UP:** Rice, groundnut, urd, mung and vegetables
- **Crop Stage:** early vegetative stage
- **Crop Condition:**
- **East UP:** Crop condition is improving
- **West UP:** Crop condition is improving
- **Advisories:**
 - Undertake weeding, intercultural operations in early sown crops.
 - **Major Seasonal Crop with stage:** Sugarcane (vegetative) and vegetables (vegetative/fruited), mango (fruit setting)
- **Crop Condition: Good**
- **Advisory**
 - Undertake weeding, intercultural operations and application of fertilizers in the standing crops like sugarcane, vegetables and mentha.
 - Continue field preparation and planting of turmeric and ginger
 - Remove the second flushes of weeds from paddy field by hand weeding or paddy weeder
 - Top dressing of 1/3 amount of Urea in the paddy field

- If zinc sulphate are not applied @25 kg /ha as basal at the time of sowing/transplanting of rice then use foliar
- application of Zinc sulphate @5 kg/ ha or Zinc oxide @0.8 kg/ ha if khaira disease symptom appears
- **Plant Protection:** Weather conditions are favourable for mild incidences of fruit borer in tomato and brinjal, spray the solution of Carbaryl @ 2 g / litre of water

J & K

- **Realised Rainfall:** Most of the districts received deficient/scanty rainfall during last week.
- **Rainfall distribution for last 5 weeks**

State / Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
Kathua	-10	-59	-29	-93	-98
Kupwara	-37	-90	-95	-76	-83
Ladakh(Leh)	-92	-100	-100	-100	-100
North Baramula	30	-83	-95	-95	-46
Pulwama	147	-49	-50	-64	-64
Srinagar	12	-93	-66	-68	-52
2 weeks continuously deficient to no rain					
Jammu	-55	35	18	-68	-65
Distribution of rainfall for remaining districts of the state for last five weeks					
Anantnag	76	-83	-58	90	-19
Doda	36	-78	-76	-6	19
Udhampur	-57	-73	-32	19	-64

- **Rainfall Forecast:** Rain/thundershowers at a few places over the state.
- **Major Kharif Crops:** Rice, maize, vegetables
- **Crop Stage:** vegetative
- **Crop Condition:** Crop condition improved due to recent rainfall.
- **Advisory:** Farmers are advised to undertake intercultural operations in early sown crops. Also undertake application of fertilizers and pesticides on a non rainy day.
- **Major Seasonal Crop with stage:** Vegetables (vegetative/flowering/fruited)
- **Crop Condition:** Good
- **Advisory:** Sowing of carrot and nursery sowing of cabbage, cauliflower, knol khol, radish and spinach may be done. Undertake harvesting of matured vegetable crops like brinjal, tomato, bhindi.
- In fallow lands, farmers are advised to plan for rabi crops so that sowing of crops like toria and gobi sarson may be undertaken during the first fortnight of September.
- **Plant Protection:** Apply phorate 10G @ 10 kg/ha or carbofuron 3G @ 20 kg/ha for control of root weevil and threadworms in rice on a non rainy day.

Rajasthan

- **Realised Rainfall:** All the districts in the State received deficient/scanty rainfall except Hanumangarh in West Rajasthan.
- **Rainfall distribution for last 5 weeks**

State / Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
East Rajasthan					
Ajmer	-57	-100	-74	-29	-97
Banswara	65	-99	-96	-71	-81
Bhilwara	-27	-100	-76	-60	-90
Chittorgarh	37	-99	-65	-40	-71
Dungarpur	121	-100	-82	-79	-83
Jhalawar	-29	-100	-93	-46	-89
Rajsamand	56	-100	-76	-31	-92
Sirohi	98	-98	-93	-87	-56

West Rajasthan					
Barmer	182	-100	-100	-100	-100
Bikaner	2	-100	-100	-90	-88
Churu	-23	-100	-98	**	-47
Jaisalmer	49	-100	-100	-100	-91
Jalore	19	-99	-100	-100	-100
Jodhpur	2	-100	-100	-93	-97
Nagaur	-82	-100	-95	-51	-61
Pali	20	-99	-93	-59	-61
Sri Ganganagar	10	-100	-100	-67	-48
Distribution of rainfall for remaining districts of the state for last five weeks					
East Rajasthan					
Alwar	-26	-97	-94	98	-38
Baran	-81	-100	-99	128	-89
Bharatpur	31	-96	-71	125	-73
Bundi	-87	-100	-94	-11	-98
Dausa	-59	-100	-91	43	-94
Dholpur	-97	-100	-76	32	-93
Jaipur	-73	-100	-89	51	-83
Jhunjhunu	-73	-100	-94	43	-52
Karauli	-73	-100	-71	134	-100
Kota	-53	-100	-93	-8	-89
Sawai Madhopur	-89	-100	-76	44	-100
Sikar	-80	-100	-95	-5	-40
Tonk	-68	-100	-94	-6	-100
Udaipur	142	-99	-81	-12	-86
West Rajasthan					
Hanumangarh	-44	-100	-100	53	47

- **Rainfall Forecast:** Isolated rain / thundershowers are likely at many places over East Rajasthan and at isolated places over West Rajasthan.
- **Major Kharif Crops:**
- **East Rajasthan:** Cowpea, bajra, maize
- **West Rajasthan:** Pearl millet, sorghum, maize, cluster bean, Sesamum, Pigeonpea, Groundnut
- **Crop Stage:** vegetative
- **Crop Condition: Satisfactory**
- **Advisory:** Postpone irrigation in East Rajasthan as rain/thundershowers is likely at many places during next five days. Apply irrigation in West Rajasthan as rain/thundershowers is likely at a few places during next five days
- Undertake intercultural operations in early sown crops.
- Apply fertilizers with sufficient moisture available in the soil.
- Intercrop early maturing varieties of pearl millet with early maturing varieties of greengram, mothbean, cowpea, clusterbean and sesame.
- Arrange for drainage facilities to avoid water stagnation in East Rajasthan.
- **Major Seasonal Crop with stage:** vegetable crops (flowering / fruiting / harvesting)
- **Crop Condition: Good**
- **Advisory:** Undertake intercultural operations in bajra, jowar, sweet gourd, cucumber, pumpkin, bitter gourd, tinda, tomato and ladies finger.
- Apply irrigation to already sown crop.
- **Plant Protection:**
 - Spray Malathion 50 EC @ 1.0 ml or Endosulfan 35 EC @ 1.5 ml per litre water to control mango hopper in mango tree
 - Spray Karathane @ 1 ml or Sulphur Fungicide @ 2.5 g / litre of water to control .powdery mildew in mango and vegetables
 - Spray Endosulphan @ 2 ml per litre of water to control fruit borer in tomato, brinjal and bhindi in Banswara.
 - Spray chemicals after spells of rain in East Rajasthan and on a non rainy day in West Rajasthan.

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

Bihar

- **Realised Rainfall:** Most of the districts of Bihar received normal/excess rainfall.
- **Rainfall distribution for last 5 weeks**

Bihar					
State/Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
Bhabua	90	-100	-78	-93	-75
Distribution of rainfall for remaining districts of the state for last five weeks					
Araria	-20	72	49	62	42
Aurangabad	7	-98	-78	418	43
Begusarai	27	-77	-65	6	2
Bhagalpur	183	72	-17	422	-87
Bhojpur	-48	-98	-60	34	-86
Buxar	-14	-99	115	122	35
Darbhanga	123	133	-32	3	135
East Champaran	123	60	105	88	-8
Gaya	2	-98	-69	29	-50
Gopalganj	116	-53	40	-7	31
Jhanabad	9	-100	-86	20	-59
Jamui	40	-98	-4	163	-4
Kathihar	-5	88	-28	129	-31
Khagadia	40	-29	8	58	50
Kishanganj	-70	-68	-99	33	-30
Madhepura	-37	212	-77	-5	36
Madhubani	191	121	-64	66	33
Monghyar	32	-53	-40	16	114
Muzaffarpur	6	-8	-52	64	1
Nalanda	-49	-92	-65	4	-20
Patna	-41	-88	81	1	-3
Purnea	86	64	87	299	49
Rohtas	16	-95	-32	160	0
Saharsha	39	251	64	56	21
Samstipur	34	-18	1	35	58
Saran	9	-93	-71	81	-47
Sitamarhi	26	141	-70	115	-30
Siwan	-50	-73	-22	47	-24
Supaul	88	110	-72	43	55
Vaishali	-86	-100	34	18	-37
West Champaran	68	107	58	138	-55

- **Rainfall Forecast:** Rain/thundershowers at a few places over the state.
- **Major Kharif Crops:** urd, sunflower, maize and pigeon pea
- **Crop Stage:** Sowing/transplanting
- **Crop Condition: Good**
- **Advisory**
 - Farmers are advised to continue sowing of contingent crops like tur pigeon pea in upland areas in place of rice. Utilising the realized rainfall, farmers are advised to do paddy transplanting only in medium and low land situations with increased seedlings.
 - Farmers are also advised to do the transplanting of early varieties of cauliflower.
- **Major Seasonal Crop with stage:** Sugarcane (vegetative/grand growth), fodder maize, jowar, lobia and sudan grass (vegetative)
- **Crop Condition:** Satisfactory
- **Advisory:**
 - Undertake intercultural operations, application of fertilizers after on a non rainy day.

- Postpone irrigation to the standing crops as there was good rainfall in most of the districts during last week.
- Farmers are advised to sow mishrikand and vegetable crops like tomato, brinjal, chillies in the upland areas.
- **Plant Protection:** Weather conditions are favourable for mild incidences of
 - diseases in poultry birds. Care should be taken to ensure that poultry feeds and bed of the poultry house do not get wet from rain water.

Jharkhand

- **Realised Rainfall:** Most of the districts of the State received normal/excess rainfall.
- **Rainfall distribution for last 5 weeks**

Jharkhand					
State/Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
Godda	-63	-100	-100	**	-88
Gumla	-8	-85	-74	-99	-32
Distribution of rainfall for remaining districts of the state for last five weeks					
Bokaro	-33	-95	-74	-8	105
Dhanbad	-29	-35	-71	-15	53
East Singhbhum	32	-64	-59	-38	45
Giridih	-66	38	-33	81	5
Hazaribagh	-62	-98	-97	76	70
Koderna	-76	-100	-86	43	-100
Lohardagga	-60	-96	-77	-87	37
Palamau	-15	-99	-79	-49	1
Ranchi	-72	-29	-60	-31	42
Santhal Parganas	-38	-10	-65	3	-20
West Singhbhum	-7	-74	-9	337	22

- **Rainfall Forecast:** Rain/thundershowers at many places over Jharkhand during next 48 hours and decrease thereafter.
- **Major Kharif Crops:** Maize, Arhar, Til, Ragi, Vegetables
- **Crop Stage:** Sowing
- **Crop Condition:** Crop condition is improving.
- **Advisory:** Continue sowing of arhar, maize in upland, middle land.
- **Major Seasonal Crop with stage:** Sugarcane (vegetative/grand growth),
- **Crop Condition:** Good
- **Advisory:** Farmers are advised to undertake weeding, intercultural operations in sugarcane after current spells of rain.
 - Undertake planting of mango variety like Mallika, Amrapali, Langra, Himsagar in the pits already filled with soil and manures.
 - Undertake transplanting of brinjal, chilly, tomato utilizing the realized rainfall.

Orissa

- **Realised Rainfall:** Most of the districts received normal/excess rainfall except Malkangiri.

Orissa					
State/Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
2 weeks continuously deficient to no rain					
Malkangiri	-54	-82	**	-58	-49
Distribution of rainfall for remaining districts of the state for last five weeks					
Angul	-94	-90	**	-24	108
Balasore	-32	-59	**	-58	65
Bargarh	-66	-99	**	-94	113
Bhadrak	-52	-51	**	-21	129
Bolangir	-88	-94	**	16	94
Boudh	-62	-96	**	-45	192

Cuttack	-28	-83	**	-41	162
Deogarh	-94	-88	**	-45	25
Dhenkanal	-89	-93	**	-65	70
Gajapati	-90	-75	**	29	64
Ganjam	-81	-61	**	-45	106
Jagatsingpur	-87	-26	**	-14	52
Jajpur	-66	-84	**	-10	134
Jharsuguda	-50	-80	**	6	-1
Kalahandi	102	-55	**	-39	99
Kandhamal	-61	-94	**	43	39
Kendrapara	-55	-59	**	-66	94
Keonjhar	-80	-60	**	-55	81
Khurda	-91	-83	**	-29	83
Koraput	-25	-84	**	2	12
Mayurbhanj	-46	-72	**	-62	22
Nawapara	-32	-96	**	-69	144
Nawarangpur	71	-38	**	-77	201
Nayagarh	-59	-65	**	-23	108
Puri	-75	-75	**	-17	29
Rayagada	-45	-91	**	-30	64
Sambalpur	-89	-96	**	1	43
Sonepur	-84	-91	**	-29	30
Sundargarh	-51	-67	**	-15	1

- **Rainfall Forecast:** Rain/thundershowers at many places with isolated heavy rainfall over the state during next 48 hours and decrease thereafter.
- **Major Kharif Crops:** Rice, ragi, arhar, maize, green gram, blackgram
- **Crop Stage:** early vegetative
- **Crop Condition:** Transplanting is continued.
- **Advisory:** Apply top dressing of nitrogen after current spells of rain.
- Complete sowing of sesame, greengram and blackgram and vegetables like lady's finger, cowpea and cluster bean and raise vegetable nurseries for cauliflower, brinjal, tomato and chillies in uplands.
 - Undertake sowing of niger in fallow upland. Grow high yielding varieties suitable for Orissa climate such as Deomali and IGP-76
- **Major Seasonal Crop with stage:** Sugarcane (early vegetative), vegetables (fruiting / harvesting), onion (vegetative), jute (vegetative),
- **Crop Condition: Good**
- **Advisory:** Undertake weeding, intercultural operations and application of fertilizers after current spells of rain.
- **Plant Protection:** Weather conditions are favourable for aphid in the maize crop. Apply 300 ml Metasystox in 200 litre of water per acre as foliar spray after current spells of rain.
 - Present weather favours wilting in brinjal and off season tomato. Spray 200 g Carbendazim + 200g Plantomycine in 200 litre water/acre. Use 15 poison baits per acre prepared by adding 2 ml Malathion + 30g gur in 1 litre water to
 - control Fruit fly in cucurbits

West Bengal

- **Realised Rainfall:** Most of the districts of West Bengal received good rainfall except Malda, South Dinajpur of Sub-Himalayan West Bengal and Bankura, Hooghly, Howrah, Murshidabad of Gangetic West Bengal.
- **Rainfall distribution for last 5 weeks:**

West Bengal					
State/Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
GWB					
Bankura	-1	101	-24	62	-24
Birbhum	-55	103	-36	-4	23
Burdwan	-26	105	-17	28	23
Hooghly	-3	38	49	31	-25
Howrah	48	-73	-38	2	-29

Midnapore	-21	-21	-28	-34	42
Murshidabad	34	6	155	18	-24
Nadia	-50	127	120	-4	10
24 Pargana (N)	-17	7	200	6	25
Purulia	8	28	-24	-6	36
24 Pargana (S)	8	-56	7	-37	13
SHWB					
Coochbehar	-31	-41	-32	174	28
Darjeeling	22	-6	-35	93	70
Jalpaiguri	12	-6	10	116	1
Malda	-8	-12	-3	216	-84
Dinajpur (N)	12	59	97	336	2
Dinajpur (S)	77	146	55	203	-35

- **Rainfall Forecast:** Rain/thundershowers at many places with isolated heavy to very heavy rainfall over the state during next 48 hours and decrease thereafter.
- **Major Kharif Crops:** Rice, vegetables
- **Crop Stage:** Transplanting
- **Crop Condition: Good**
- **Advisory:** Complete transplanting of rice seedlings.
 - Undertake transplanting of vegetable with the realized rainfall. Avoid transplanting during spells of heavy rainfall.
 - Removal of excess water from the field is advised.
- **Major Seasonal Crop with stage:** Sugarcane (vegetative)
- **Crop Condition: Good**
- **Advisory:**
 - Arrange for sowing winter vegetable crops like cabbage and cauliflower in Bankura.
 - Raise nursery for tomato in South 24 Paraganas.
 - As rain/thundershowers are likely at many places over the State, postpone irrigation and inter-cultural operations and provide drainage facilities to remove excess water.
- **Plant protection:** Weather conditions are favourable for the occurrence of fruit rot in summer vegetables in Bankura, blast in aman paddy and damping off in vegetable nursery. Undertake plant protection measures.
- In bitter gourd, cucumber mite is becoming severe in many places. To control, it apply Fenazaquin 10 EC @ 1.5 ml per litre of water. In pointed gourd, fruit and vine rot is in severe condition. Remove the infected fruits and vine from the land. Spray Metalaxyl + Mancozeb @ 2.5 gm per litre of water. Reapply it after 10 to 15 days depending upon the disease condition.
- Spray chemicals after current spells of rain.

Sikkim

- **Realised Rainfall:** The state received good amount of rainfall.
- **Rainfall distribution for last 5 weeks:**

State/Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
Sikkim	-14	-55	-53	47	18

- **Rainfall Forecast:** Rain/thundershowers at many places with isolated heavy to very heavy rainfall during next 48 hours and decrease thereafter.
- **Major Seasonal Crop with stage: Very High hills: Summer Potato:** Tuber Maturity/Harvesting; **High Altitude Maize:** Late Vegetative/Flowering (b) **High hills: Off-Season Vegetable crops:** Late Vegetative; **Seed Potatoes:** Tuber-Maturity/Early-Harvesting; (c) **High/ Medium/ Low hills: Maize:** Flowering/ Cob Maturity/ Early Harvesting; **Kharif Vegetables:** Late Vegetative; **Large Cardamom:** Secondary Flowering/Primary Capsule Formation/Capsule formation & maturity (**low hills**) (d) **Medium & Low Hills: Rice:** tillering **Ginger:** Early Vegetative/Vegetative; **Orange:** Nursery Transplanting of Seedlings/ Flowering/ Early Fruiting/Fruiting.
- **Crop Condition: Good**
- **Advisory:** Application of fertilizers, pesticides and inter-cultural operations may be undertaken after spells of rain. Arrange for drainage facilities to avoid water stagnation.

- Deshooting/debugging of newly planted to 1 – 4 years old trees, upto a basal height of 40 – 50 cm should be done on monthly basis.
 - Nursery beds of large cardamom suckers may be mulched properly with dried forest leaves in order to prevent soil erosion and weed growth.
 - Inter-cultivate in the transplanted paddy as per usual practice in order to incorporate FYM/compost and to break and scratch the compact soil. This would make the soil loose and aerate it.
 - Water level of 5 cm to at least 3/2.5 cm should be maintained in transplanted paddy fields for better yield. During the tillering stage, in the medium hills, water level of 3-4 cm should be maintained to enable maximum tillering as in case of insufficient water, tillering will be less and facilitate excess growth of weeds.
 - Top dressing of ginger with organic manures and mulching to be done after current spells of rain and on monthly basis. Proper drainage to be maintained and weeding to be done after spells of rain.
 - Diseased/pest infested suckers may be removed and destroyed.
 - Chirke and Foorkey infected cardamom plants may be destroyed by uprooting and buried in the pits at regular intervals.

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

Assam

- **Realised Rainfall:** 13 districts received normal/excess rainfall and Nowgong, Darrang, Goalpara, Karbi Anglong, Karimganj, Morigaon, Sonitpur, Jorhat, Cachar, Golghat, Hailkandi districts received deficient/scanty rainfall.
- **Rainfall distribution for last 5 weeks:**

Assam					
State/Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
Nowgong	-63	-74	-63	-72	-90
3 weeks continuously deficient to no rain					
Golghat	87	44	-64	-28	-41
Hailakandi	-68	-6	-40	-62	-33
Distribution of rainfall for remaining districts of the state for last five weeks					
Barpeta	42	344	-9	625	55
Bongaigaon	19	110	-34	455	-17
Cachar	48	120	32	33	-53
Darrang	171	106	-60	17	-66
Dhubri	-29	-52	-63	205	-12
Dibrugarh	-55	56	71	8	-9
East Garo Hills	-46	-17	-80	921	78
East Khasi Hills	57	-10	-10	444	49
Goalpara	25	166	-62	385	-70
Jorhat	16	-20	-56	55	-36
Kamrup	99	59	-45	47	-15
Karbi Analog	72	-31	-29	148	-86
Karimganj	-58	91	84	62	-60
Kokrajhar	-35	71	8	688	27
Lakhimpur	-48	58	31	114	60
Morigaon	6	-81	7	42	-73
Nalbari	37	-3	7	91	-15
Sibsagar	-33	-4	-36	62	-7
Sonitpur	-3	4	-70	140	-49
Tinsukia	-48	19	16	115	6

- **Rainfall Forecast:** Rain/thundershowers at many places with isolated heavy to very heavy rainfall
- **Major Kharif Crops: Sali paddy**
- **Crop Stage: Transplanting**
- **Crop Condition:** Transplanting of sali rice is continued.
Advisory: In flood affected areas, drainout the flood water and transplantation of aged seedlings may be

transplanted upto mid-September if seedlings of the varieties like Monohar Sali, Gitesh, Andrew Sali, Prasad Bhog, Prafulla etc. are available. Apply top dressing in early sown *sali* rice.

- Those who had lost seedlings if flood affected areas, may opt for sowing seeds of the varieties like Luit, Kapili, Culture-1 etc. These have short duration (90-95 days). Seedlings of these varieties can be transplanted when 20-25 days old upto last week of September.
- High yielding varieties of green gram such as T-44, K-801 etc. and black gram(T-9, T-27 etc.) may be sown under the prevailing weather conditions.
- Farmers are advised to sow early varieties of cauliflower(eg. Early Kuwari, Pusa Keteki, Pusa Dipali etc.).
- Postpone irrigation to the crops as rainfall at many places is likely along with isolated heavy to very heavy rainfall. Provide adequate drainage facilities to avoid water logging.
- In lower Brahmaputhra valley, aged seedlings of late rice varieties like Manohar Sali, Mainagiri, etc may be used for late planting condition. Sowing of sesamum and black gram should be started immediately in upland situation. Seed rate of black gram is 2-3 kg/bigha
- **Major Seasonal Crop with stage:** Vegetables (vegetative / flowering / fruiting / harvesting), early *ahu* rice (tillering / panicle initiation), *Capsularis* jute (vegetative / harvesting), *Olorius* jute (vegetative), maize (vegetative) and sugarcane (vegetative),
- **Crop Condition:** Good
- **Advisory:**
 - As rain/thundershowers are likely at many places over the State, postpone irrigation.
- **Plant protection:** Weather conditions are favourable for mild incidences of –
 - leaf folder or rice hispa in rice. When there is one damage leaf per hill due to attack of leaf folder or appearance of one adult hispa per hill is observed farmers are advised to spray Chloropyriphos20EC @ 1.5ml per liter of water after current spells of rain.

Arunachal Pradesh

- **Realised Rainfall:** All the districts except Tawang , Changlang and Lower Subansiri received normal/excess rainfall during last week.
- **Rainfall distribution for last 5 weeks:**

Arunachal Pradesh					
State/Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
2 weeks continuously deficient to no rain					
Tawang	-9	-27	16	-33	-63
Distribution of rainfall for remaining districts of the state for last five weeks					
Changlang	-93	-65	-90	9	-75
East Kameng	78	54	-14	-6	0
East Slang	-27	-2	-38	109	75
Lohit	-50	-6	124	135	4
Lower Subansiri	-28	-40	40	-6	-59
Papumpara	146	40	-9	271	220
Tirap	15	67	28	133	36
Upper Subansiri	47	71	15	250	43
West Kameng	229	96	-63	328	508

- **Rainfall Forecast:** Rain/thundershowers at many places with isolated heavy to very heavy rainfall
- **Major Kharif Crops:** *Jhum* rice, WRC rice, millets
- **Crop Stage:** vegetative/flowering
- **Crop Condition:** Good.
- **Advisory:** Postpone irrigation, weeding and intercultural operations. Maintain 3-5 cm standing water in rice field. Water logging in the field must also be avoided. Earthing up may be done after current spells of rain.
- **Major Seasonal Crop:** Vegetables
- Harvest the matured vegetable crops.
- **Plant Protection:** Prophylactic measure for protection of seed ginger rhizome from fungal disease may be taken.

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

Andhra Pradesh

- **Realised Rainfall:** Most of the districts of Coastal Andhra Pradesh, received normal/excess rainfall except Visakhapatnam and West Godavari. Telangana and Rayalaseema received excess rainfall during last week.
- **Rainfall distribution for last 5 weeks**

Andhra Pradesh					
Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
Coastal Andhra Pradesh					
Visakhapatnam	-83	-71	-79	-30	-62
West Godavari	-93	-66	-51	-63	-21
Distribution of rainfall for remaining districts of the state for last five weeks					
Coastal Andhra Pradesh					
East Godavari	-91	-72	-69	-48	-16
Guntur	-94	-91	-85	184	147
Krishna	-97	-87	-83	14	118
Nellore	-85	-23	-66	202	-11
Prakasam	-100	-89	-80	111	-28
Sirkakulam	-95	-32	-54	-18	1
Vizianagram	-92	-19	94	39	19
Telangana					
Adilabad	-81	-99	-60	-82	63
Hyderabad	-99	-100	-78	96	181
Karimnagar	-90	-100	-72	-79	39
Khammam	-92	-95	-75	-57	24
Mehabubnagar	-98	-99	-86	-37	78
Medak	-94	-100	-70	-63	115
Nalgonda	-99	-100	-96	6	100
Nizamabad	-88	-100	-80	-76	79
Rangareddy	-96	-100	-87	36	384
Warangal	-97	-98	-98	-67	62
Rayalaseema					
Anantapur	-91	-85	-81	35	325
Chittoor	-86	-11	-89	419	43
Cuddapah	-99	-73	-86	263	140
Kurnool	-96	-84	-72	11	38

- **Rainfall Forecast:** Rain/thundershowers at many places in Telangana during next 24 hours and decrease thereafter, few places in Rayalaseema and coastal Andhra Pradesh
- **Major Kharif Crops:** Cotton, soybean, jowar, black gram, green gram, pearl millet, finger millet, jowar, green gram, groundnut, sunflower, rice, brinjal, tomato and chillies.
- **Crop Stage:** Sowing.
- **Crop Condition:** Satisfactory. Sowing of crops like groundnut, jowar, maize, pulses, sesame, sunflower and cotton is affected in Rayalaseema and Telangana. Rainfed crops recover from moisture stress due to recent rainfall.
- **Advisory:** As the rainfall is not adequate in the State, different districtwise cropping strategies including sowing of short duration *kharif* crops is advised in many parts of the State. Farmers in Rayalaseema are advised to sow short duration rainfed groundnut. Undertake sowing of rainfed crops like ragi, cowpea, fodder jowar, blackgram, redgram, horsegram, pillipesara and sunflower in North Coastal Andhra Pradesh while horsegram, sunflower, castor and redgram in North Telangana regions
- **Major Seasonal Crop:** Sugarcane and Vegetables
 - Farmers are advised to undertake intercultural operations in sugarcane, vegetables, early sown crops to keep the fields weed free in Telangana.
 - Harvesting of the muskmelon should be completed on bright sunny day.
- **Plant Protection:** Weather conditions are favourable for mild incidences of –

- aphids in groundnut crop in Rayalaseema. To control spray monocrotophos @ 1.6 ml/lt. or dimethoate @ 2.0 ml/litre.
- sucking pests in cotton. Apply Monocrotophos solution (Monocrotophos @ 25 ml in 100 ml of water) with soft brush on tender part of the stem at 20, 40 and 60 days after sowing.
- rice thrips and hispa.
- Incidence of Red pumpkin beetle is noticed gourds like bottle gourd, ridge gourd, snake gourd and cucurbits. Control it by spraying Carbaryl 50 WP @ 3 g per litre of water.

Karnataka

- **Realised- Rainfall:** The State received normal/excess rainfall except in Bangalore (Urban) during last week.
- **Rainfall distribution for last 5 weeks**

Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
Coastal Karnataka					
Dakshin Kannada	-47	-3	-51	-46	18
Udupi	-20	6	-57	-66	31
Uttar Kannada	-43	-54	-77	-75	2
North Interior Karnataka					
Bagalkote	-89	-79	-98	231	291
Belgaum	-56	-53	-62	35	149
Bidar	-91	-100	-69	-23	172
Bijapur	-92	-98	-94	142	524
Dharwad	-73	-58	-89	-39	54
Gadag	-95	-89	-87	325	208
Gulbarga	-94	-99	-81	-29	252
Haveri	-7	-3	-72	28	166
Koppal	-98	-84	-97	140	539
Raichur	-99	-88	-48	30	215
South Interior Karnataka					
Bangalore Rural	-97	8	-4	25	72
Bangalore Urban	-100	6	-33	202	-43
Bellary	-93	-76	-70	229	83
Chamarajnagar	-100	-55	-81	514	60
Chickmagalur	-54	-26	-74	-12	53
Chitradurga	-81	-86	-24	374	458
Davangere	-57	-38	-7	332	246
Hassan	-54	-88	-92	14	58
Kodagu	-48	-14	-43	-42	-1
Kolar	-92	-54	-80	192	177
Mandya	-88	-26	-97	794	186
Mysore	-89	6	-54	420	156
Shimoga	17	-15	-45	-41	43
Tumkur	-98	-21	-57	92	311

- **Rainfall Forecast:** Rain/thundershower at many places over coastal Karnataka and at a few places over Interior Karnataka.
- **Major Kharif Crops:** Jowar, Maize, Bajra, Redgram, Ragi, Greengram, Blackgram, Cowpea, Sesamum, Groundnut, Sunflower, Soyabean, Cotton.
- **Crop Stage:** Sowing/ transplanting. Early sown crops are at early vegetative/vegetative stage.
- **Crop Condition:** Satisfactory. There is improvement in crop condition interior Karnataka, due to good amount of rainfall during last week.
- **Advisory:** Continue transplanting of rice in coastal Karnataka. Undertake sowing of short duration alternate *kharif* crops in Interior Karnataka (See Annexure I).
- **Major Seasonal Crop:** Sugarcane and Vegetables
- Undertake ratooning in sugarcane. Undertake intercultural operations in sugarcane and early sown crops to keep the field weed free after current spells of rain in Coastal Karnataka and on a non rainy day in Interior Karnataka.

- **Plant Protection:** Weather conditions are favourable for mild incidences of –
 - powdery mildew disease in green gram, spray Carbendazim 0.1%.
 - thrips, mites and murda-complex disease in chilli, spray 1.7 ml Rogar or 1.5 ml Metasystox +2.5ml Dicofol per litre of water.
 - Undertake spraying on a non rainy day in South Interior Karnataka and after current spells of rain in coastal Karnataka.

Kerala

- **Realised Rainfall:** The state received normal/excess rainfall except Idukki, Pathanamthitta, Wyanad, Alappuzha, Kannur districts.
- **Rainfall distribution for last 5 weeks**

Kerala					
Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
Ernakulam	-49	-20	-75	-41	**
Idukki	-74	-37	-42	-46	-37
Pathanamthitta	-65	**	-56	-36	-26
Wyanad	-84	-67	-82	-70	-49
3 weeks continuously deficient to no rain					
Alappuzha,	-66	-16	-86	-39	-61
Kannur	-40	-5	-40	-85	-26
Distribution of rainfall for remaining districts of the state for last five weeks					
Kasaragod	-50	-2	-55	-49	25
Kollam	-76	-51	-67	-30	-11
Kottayam	-81	25	-71	-59	-10
0Kozhikode	-44	-6	-60	-88	-16
Malappuram	-59	-40	-59	-91	44
Palakkad	-60	-34	-77	-56	69
Thiruvananthapuram	-90	-42	-95	-79	39
Thrissur	-67	-2	-74	-28	46

- **Rainfall Forecast:** Rain/thundershowers at many places over the State.
- **Major Kharif Crops:** Rice
- **Crop Stage:** Tillering.
- **Crop Condition:** Good.
- **Advisory:** Intercultural operations, application of fertilizers and pesticides may be continued after current spells of rain.
- **Major Seasonal Crop:** Vegetables and plantation crops (coconut, arecanut, pepper and cashew).
- Intercultural operations, application of fertilizers and pesticides may be continued after current spells of rain
- **Plant Protection:** Weather conditions are favourable for mild incidences of –
 - leaf folder and stem borer in paddy fields. Farmers may go for Tricho cards (Trichogramma chilonis against leaf folder and Trichogramma japonicum against stem borer) if their incidence noticed.
 - thrips in broadcasted rice field, spray carbaryl or dimethoate @250ml/ha.
 - Undertake spraying after current spells of rain.

Tamilnadu

- **Realised Rainfall:** Most of the districts received deficient / scanty rainfall except Coimbatore, Dharmapuri, Erode, Kanyakumari, Namakkal, Nilgiris, Salem, Tirunelveli, Tiruvarur during last week.
- **Rainfall distribution for last 5 weeks**

Tamilnadu					
Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
Chennai	-25	-12	-29	4	-85
Coimbatore	-7	162	24	328	251
Cuddalore	-100	247	-96	169	-73
Dharmapuri	-100	-93	-100	381	-2

Dindigul	-99	-16	-83	453	-34
Erode	-100	-11	-93	435	-13
Kanchipuram	-37	154	-90	34	-89
Kanyakumari	-100	-61	-95	-83	342
Karur	-100	-95	-24	305	-75
Krishnagiri	-100	-36	-86	331	-60
Madurai	-98	220	-59	260	-42
Nagapattinam	-100	306	-33	153	-76
Namakkal	-93	-69	-80	273	9
Nilgiris	-71	-42	-57	23	33
Perambalur	-100	29	-97	261	-96
Pondicherry	-100	129	-61	137	-39
Pudukottai	-97	-2	-98	**	-98
Ramanathapuram	-100	-44	-91	375	-54
Salem	-91	85	-93	377	42
Sivaganga	-78	167	9	355	-81
Thanjavur	-100	-60	-65	292	-31
Theni	-87	36	-66	283	-43
Tirunelveli	-100	-96	-97	238	212
Tiruvallur	-31	63	-67	144	-29
Tiruvannamalai	-100	171	-96	99	-100
Tiruvarur	-100	-2	5	200	61
Trichy	-100	5	-100	532	-53
Tuticorin	-100	12	-100	241	-47
Vellore	-94	29	-100	203	-73
Villupuram	-100	286	-89	195	-76
Virudhunagar	-100	-100	-89	29	-73

- **Rainfall Forecast:** Rain/thundershowers at isolated places over the places.
- **Major Kharif Crops:** Groundnut, pulses and rice
- **Crop Stage:** Sowing/transplanting
- **Crop Condition:** Good
- **Advisory:** Continue sowing of crops like pulses, groundnut and transplanting of rice seedlings wherever sufficient rainfall received during last week.
- **Major Seasonal Crop:** Sugarcane, banana and vegetables.
 - Intercultural operations, application of fertilizers may be continued in vegetables and sugarcane
 - Due to the forecast of high wind speed for coming days, provide staking for banana in Coimbatore and Kanyakumari.
 - Undertake picking of cotton in Thirunelveli, Tuticorin and Virudhunagar districts.
- **Plant Protection:** Weather conditions are favourable for mild incidences of –
 - sheath blight in rice, spray edifenphos at 1 l / ha to control the disease.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT, RAJASTHAN]

Maharashtra

- **Realised Rainfall:** Most of the districts except Raigad, Thane, Nandurbar, Bhandara received normal/excess rainfall during last week.
- **Rainfall distribution for last five weeks**

Maharashtra					
State/Districts	15.07.09	22.07.09	29.07.09	05.08.09	12.08.09
More than 3 weeks continuously deficient to no rain					
Konkan & Goa					
Raigad	-25	-91	-86	-85	-26
Thane	81	-93	-85	-85	-52
Madhya Maharashtra					
Nandurbar	3	-95	-64	-99	-27
Vidarbha					
Bhandara	-62	-93	-68	-50	-25

Distribution of rainfall for remaining districts of the state for last five weeks					
Konkan & Goa					
Goa	-66	-73	-88	-48	-9
Mumbai	-46	-98	-92	-91	93
Ratnagiri	-34	-81	-84	-72	2
Sindhudurg	-42	-76	-80	-17	-19
Madhya Maharashtra					
Ahmednagar	-1	-99	-99	3	404
Dhule	-56	-100	-82	-99	189
Jalgaon	-41	-99	-93	-93	106
Kolhapur	59	-71	-72	-53	46
Nasik	269	-90	-61	-72	225
Pune	-1	-94	-91	-75	207
Sangli	-30	-92	-77	-32	270
Satara	81	-84	-65	-36	224
Solapur	-85	-100	-99	-39	479
Marathwada					
Aurangabad	-55	-99	-90	-88	163
Beed	-93	-100	-96	-69	261
Jalna	-68	-100	-88	-93	253
Latur	-96	-99	-81	-90	137
Nanded	-97	-100	-81	-91	73
Usmanabad	-67	-100	-100	-34	272
Parbhani	-89	-100	-85	-47	159
Vidarbha					
Akola	-50	-100	-70	-99	239
Amraoti	-50	-100	-93	-97	89
Buldhana	-43	-100	-78	-99	207
Chandrapur	-62	-99	-68	-80	11
Gadchiroli	-44	-99	-41	-43	3
Gondia	-60	-98	-70	-42	-8
Nagpur	-30	-99	-63	-85	31
Wardha	-51	-100	-87	-70	90
Washim	-73	-100	-96	-98	123
Yeotmal	-73	-100	-79	-84	72

- **Rainfall Forecast:** Rain/thundershowers at many places over the state with isolated heavy rainfall over Vidarbha and Konkan & Goa.
- **Major Kharif Crops:** Rice, ragi, cotton, Vegetables, Pulses, bajra, groundnut, tur, horse gram, soybean, jowar
- **Crop Stage:** Early tillering in Konkan, Kolhapur, Nashik & Pune divisions and other *kharif* crops are in early vegetative stage/ vegetative growth stage. Irrigated cotton is at vegetative/ floral bud formation and early sown green gram & black gram are at flowering stage.
- **Crop Condition:** Good
- **Advisory:** As most of the districts of the State received significant rain during last 4-5 days and rainfall is likely at many places over Konkan, Madhya Maharashtra, Marathwada & Vidarbha during next five days, postpone irrigation to the standing crops and weeding, intercultural operations and top dressing of fertilizers to the standing crops may be carried out after current spells of rain.
 - **Major Seasonal Crop:** Fruit crops, Sugarcane and vegetables
 - Apply second dose of nitrogenous fertilizers to *kharif* rice in Konkan, Kolhapur, Nashik & Pune divisions divisions.
 - Spray 2 % Urea in soyabean at flowering stage.
 - Apply final dose of Nitrogen @ 50 kg Urea /acre to cotton after 45 to 60 days from sowing. Also spray 2 % DAPS for boll development.
 - Undertake intercultural operation, fertilizer application in standing *kharif* crops, sugarcane and vegetables after current spells of rain in Konkan.

- **Plant Protection:** Weather conditions are favourable for mild incidences of –
- blast in cotton in central vidarbha zone & sap sucking pests in Central Maharashtra plateau zone. Spray copper oxy chloride @ 25 gm + Streptocyclin @ 1 gm in 10 liters of water against blast and spray Dimethoate 30 % @ 10 ml in 10 liters of water against sap sucking pests.
- powdery mildew in green gram & black gram in Central Mahaarashtra zone. Spray water soluble Sulphur 80 % @ 25 gm in 10 liters of water.
- blue beetle and leaf folding caterpillar & blast in *kharif* paddy. For control of blue beetle and leaf folding caterpillar, spray Carbaril powder @ 2gm / lit of water with 1 ml sticker and for control of blast disease in transplanted rice field, spraying of Carbendazim @ 1gm / liter or copper-oxy-chloride @ 2.5gm/liter of water with 1 ml. sticker may be done.
- There is attack of green semilooper in soyabean in Amravati and Nagpur division, spray Endosulfan 35% @17ml per 10 liters of water. There is also attack of girdle beetle pests in Central Mahaarashtra zone. For control spray Dimethoate 30 % @ 10 ml in 10 liters of water.
- Undertake spraying after current spells of rain.

Gujarat

- **Realised Rainfall:** Except DNH & Daman, Surat and Valsad, most of the districts of the state received scanty/no rainfall.
- **Rainfall distribution for last five weeks**

State/Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
2 weeks continuously deficient to no rain					
Gujarat Region					
Ahmedabad	24	-100	**	-99	-99
Anand	-36	-99	**	-94	-78
Banaskantha	89	-99	**	-99	-100
Baroda	**	-99	**	-96	-96
Broach	-46	-99	**	-97	-67
Dahod	-18	-99	**	-86	-70
Dangs,	33	-98	**	-86	-59
Gandhinagar	201	-99	**	-96	-99
Kheda	3	-99	**	-72	-95
Mehsana	39	-99	**	-97	-100
Narmada	12	-99	**	-99	-59
Navsari	76	-95	**	-83	-68
Panchmahal	-21	-99	**	-87	-91
Patan	18	-100	**	-100	-100
Sabarkantha	111	-99	**	-98	-94
Saurashtra, Kutch & Diu region					
Amreli	30	-100	**	-100	-100
Bhavnagar	-15	-96	**	-91	-99
Diu	**	-99	**	**	-100
Jamnagar	421	-100	**	-84	-99
Junagarh	488	-99	**	-94	-100
Kutch	353	-99	**	-90	-95
Porbandara	794	-100	**	-92	-100
Rajkot	185	-100	**	-88	-100
Surendranagar	21	-100	**	-95	-100
Distribution of rainfall for remaining districts of the state for last five weeks					
Gujarat Region					
DNH & Daman	174	-97	**	-93	32
Surat	77	-96	**	-92	-14
Valsad	163	-95	**	-95	-19

- **Rainfall Forecast:** Rain/thundershowers at many places over Gujarat region with isolated heavy rainfall and at a few places over Saurashtra & Kutch region.
- **Major Kharif Crops:** Rice, castor, pigeon pea, cotton, groundnut, bajra, sesamum, cluster bean, pulses

- **Crop Stage:** Sowing
- **Crop Condition:** Crop condition is satisfactory
- **Advisory:** Continue sowing of castor, tur
- As there was no significant rainfall during last week in Saurashtra & Kutch region, apply irrigation to the crops.
- **Major Seasonal Crop:** Fruit crops, Sugarcane and vegetables
 - Apply irrigation in Undertake intercultural operation and application of fertilizer and plant protection measures to the early sown standing crops.
 - Undertake planting of different fruit crops like mango, sapota, pomegranate, lemon, guava, custard apple etc.
- **Plant Protection:** Weather conditions are favourable for mild incidences of –
 - seedling rot in vegetable nursery, drench nursery with Bordeaux mixture@ 0.6% or Ridomil MZ@0.05% .
 - collar rot and root rot diseases are observed in cotton and groundnut. Spray carbendazim @10 gm + mencozeb @ 20 gm in 10 liters of water
 - Spary fungicides on a non rainy day in Saurashtra & Kutch region and after current spells of rain Gujarat region.

CENTRAL INDIA [M.P., CHHATTISGARH]

Madhya Pradesh

- **Realised Rainfall:** The state received deficient/ scanty rainfall except Balaghat, Chindwara, Umaria districts of East Madhya Pradesh and Badwani, Betul and Dhar districts of West Madhya Pradesh, where normal/excess rainfall was there during last week.
- **Rainfall distribution for last 5 weeks**

State/Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
East Madhya Pradesh					
Damoh	-83	-100	-39	-72	-80
Dindori	-71	-100	-78	-38	-57
Katni	-89	-100	-76	-21	-84
Mandla	-47	-100	-63	-41	-62
Narsingpur	-59	-100	-22	-55	-79
Seoni	-29	-100	-49	-55	-34
Shahdol	-92	-100	-77	-68	-39
Sidhi	-96	-100	-99	-26	-40
2 weeks continuously deficient to no rain					
Jabalpur	-79	-100	13	-73	-69
Sagar	-72	-100	25	-40	-77
Distribution of rainfall for remaining districts of the state for last five weeks					
Panna	-97	-100	-92	173	-96
Rewa	-90	-100	-61	-7	-92
Satna	-90	-100	-96	92	-90
Tikamgarh	-97	-100	-83	50	-96
Umaria	-44	-100	-88	-73	2
Balaghat	-59	-95	-48	-56	0
Chhatarpur	-94	-100	-89	43	-96
Chindwara	-14	-100	-96	-84	-11

State/Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
West Madhya Pradesh					
More than 3 weeks continuously deficient to no rain					
Bhopal	-21	-100	-63	-85	-98
Dewas	24	-99	-65	-74	-56
Gwalior	-93	-96	-91	-25	-90

Harda	190	-100	-100	-81	-59
Indore	188	-99	-96	-75	-75
Jhabua	98	-97	-94	-81	-75
Khandwa	36	-100	-96	-92	-33
Khargone	123	-98	-94	-82	-25
Mandsaur	-24	-99	-54	-54	-89
Raisen	-37	-99	-56	-55	-69
Rajgarh	-23	-100	-92	-65	-89
Ratlam	91	-99	-68	-24	-57
Sehore	-20	-99	-88	-44	-71
Shajapur	14	-100	-67	-57	-83
Ujjain	58	-99	-75	-63	-71
Distribution of rainfall for remaining districts of the state for last five weeks					
Badwani	-32	-100	-86	-100	1
Betul	-15	-100	-98	-87	35
Bhind	-95	-97	-75	58	-91
Datia	-99	-98	-86	39	-25
Dhar	66	-99	-80	-82	8
Guna	-71	-100	-20	-9	-74
Hosangabad	70	-99	-88	22	-44
Morena	-97	-100	-87	162	-71
Neemuch	-44	-100	-91	12	-89
Sheopur Kalani	-97	-100	-55	21	-100
Shivpuri	-80	-100	-48	53	-33
Vidisha	-55	-100	-41	-5	-67

- **Rainfall Forecast:** Rain/thundershowers at many places with isolated heavy rainfall over the State.
- **Major Kharif Crops:** Rice, jowar, sunflower, maize, jowar and soybean
- **Crop Stage:** transplanting. Early sown crops in early vegetative stage.
- **Crop Condition:** Good. However in Gwalior and Chambal divisions soybean and rice crops are under water stress conditions
- **Advisory:** Complete the transplanting of rice at earliest by reducing row distance and 2-3 seedlings per hill. Transplant the 14 days old seedlings in main field of rice for SRI system. Transplant the rice seedlings by lehi system if farmers couldn't follow SRI system.
- **Apply irrigation on the standing crops in the stress districts**
 - Continue sowing of short duration *kharif* crops like jowar, sunflower, maize, jowar and soybean.
 - Manage proper drainage facilities in the field. Follow inter cropping of maize and mung with soybean.
 - During stress period farmers could perform the intercultural operation, such as weeding, and soil mulching etc.
 - Destroy YMV affected plants from soybean field and spraying of Methyle Demeton for controlling of vector.
 - For control of stem borer in maize crop use Foret 10G @ 1.5 kg/ha (drop 2-4 granules in foliage).
 - To control pests in paddy crop use 10 Kg Carbofuron per hectare.
 - Prepare /Repair bunds for soil and water conservation.
- **Major Seasonal Crop with stage:** Sugarcane (cane development), cotton (boll development/ maturity) and vegetable crops (vegetative)
- **Crop Condition:** Good
- **Advisory:** Undertake intercultural operations after spells of rain in the seasonal crop.
- **Plant Protection:** Weather conditions are favourable for-
 - fruit fly in okra in Jabalpur, Katni, Panna, Rewa, Satna, Seoni and Sidhi districts, spray trizophos crops in open weather conditions @ 1.5 ml per liter.
 - fruit fly in bhindi, tomato, beetle guard, cucurbit in Tikamgarh, Chattarpur and Datia, spray Malethyon 50 EC 1 ml or Trijophos 40 EC 1.5 ml per litre of water.
 - Sucking pest in soybean in Bhopal, Sehore, Damoh, Vidisha, Raisen, Sagar, Sehore.
 - Application of pesticides may be undertaken after spells of rain.

- **Animal Husbandry:** To control ticks and mite in cattle, sheep and goat, apply butox / deltox @ 4 ml / litre of water on the body in Jhabua and Dhar districts.
- Arrange vaccination for animals to protect from the disease Galgotu, Langadi and Anthrex in Sagar, Bhopal, Vidisha, Damoh, Raisen, Sehore.

Chattisgarh

- **Realised Rainfall:** There is improvement in rainfall activity during last two weeks. All most all the districts received adequate rainfall.
- **Rainfall distribution for last 5 weeks**

State/Districts	29.07.09	05.08.09	12.08.09	19.08.09	26.08.09
More than 3 weeks continuously deficient to no rain					
Dantewara	-74	-87	-69	-80	-60
Surguja	-81	-95	-57	-49	-63
2 weeks continuously deficient to no rain					
Dhamtari	-47	-100	23	-96	-38
Distribution of rainfall for remaining districts of the state for last five weeks					
Bastar	-3	-96	-47	-65	93
Bilaspur	-70	-97	24	-12	48
Durg	-70	-99	-26	-53	34
Janjgir	-86	-100	-42	-72	53
Jashpurnagar	-23	-70	-9	-16	18
Kanker	-14	-100	-41	-30	-12
Korba	-17	-98	-21	-63	-6
Koriya	-92	-99	-63	75	-41
Kowardna	-89	-100	42	-69	23
Mahasumund	-58	-100	14	-74	-7
Raigarh	-73	-99	-55	-56	-11
Raipur	-71	-97	-4	-51	51
Rajandgaon	-43	-99	-43	-68	-16

- **Rainfall Forecast:** Rain/thundershowers at many places with isolated heavy rainfall over the State.
- **Major Kharif Crops:** Rice, soybean, maize, sesamum, tur.
- **Crop Stage:** Early vegetative
- **Crop Condition:** Good
 - **Advisory:** Interculture operations, weeding, application of N and earthing in rainfed maize crop at knee height stage may be continued on after current spells of rain.
- **Major Seasonal Crop with stage:** Sugarcane (vegetative), vegetables (flowering / fruiting / harvesting), irrigated maize (vegetative)
- **Crop Condition:** Good
- **Advisory:** Intercultural operation and earthing up and also application of fertilizers may be continued on after current spells of rain.
- **Plant Protection:** Weather conditions are favourable for mild incidences of –
- swarming caterpillar/armyworm is likely to occur in rice crop adjacent to forest area. Hence, farmers are advised to keep watch over the crop and if necessary dusting of Methyl Parathion 2% @ 25 kg/ha or spraying of Chlorpyrifos 20 EC or Endosulphon 400-500 ml per acre in 200 liters of water is advised. Spraying of Decametherin or Sypermethrin @ 1.5 ml/litre in combination with DDVP @0.5 ml/liter of water can also be done.

Annexure I

Bangalore (urban) and Tumkur

- Farmers are advised to raise nursery of Fingermillet (ragi). Short duration varieties for direct sowings can be taken up (Indaf-8, Indaf-9, HR-911, PR-202 and MR-10). In the tank fed area, farmers are advised to go for preparation of paddy nursery. The Medium duration varieties recommended are: IR-3864, Puspa, IR-20 & Hybrid KRH-1 KRH-2 Short duration Rasi (IET-1444), Tellahamsa, Mangala, Mukthi (CTH-3)

Bidar

- The farmers are advised to go for sowing of niger, horsegram, bajra, sunflower as an alternative crop.
- Those farmers who have irrigation facilities can sow the pigeon pea with 25% extra seeds than recommended seed rate

Technology Tips for Mitigating Drought in Sugarcane

- In the event of drought 60 kg K₂O/ha may be applied with last irrigation
- Weed control through herbicides may be taken in late planted cane (2; 4-D @ 1.5 kg/ha)
- If there are no rains then mulching by dry leaves and grasses may be done to conserve soil moisture.
- Spray of 2.5% each of urea and KCl in the situations of prolonged drought
- The hoeing in inter row spacing may be undertaken to create dust mulch to break soil capillaries for checking surface moisture loss.

Bijapur

- Contingency crops for August first fortnight sowing in red and shallow black soils: In places where sowing was not taken up during June and July due to non receipt of rainfall, sowing of bajra, sunflower, Navane, Horsegram and intercropping of Sunflower + Castor in 4:2 row proportion is advised.
- Contingency crops for August first fortnight sowing in medium to deep black soils : Sowing of bajra, sunflower, horsegram, *herbaciium* cotton (Jayadhar, Suyodhar), intercropping of Sunflower + Castor in 4:2 row proportion, and cotton as relay crop in Ground nut crop can be taken up.
- To conserve moisture in the lands where *kharif* sowing is not done and that land is spared for *rabi* sowing, compartment bunds/contour bunds can be made and/or repeated intercultivation to conserve water can be practiced.
- Due to low rainfall during July in the district, some area has not been sown. This may result in shortage of fodder to animals. So, sowing of fodder crops like fodder sorghum and maize, cowpea, horse gram can be given preference in the land where the *kharif* crops have not been sown and also on lands which are spared for sowing of *rabi* crops.

Raichur and Gulbarga

- In areas left unsown due to lack of rainfall and land areas sown by early season *kharif* crops like greengram, blackgram etc., and harrowed due to lack of soil moisture are to be kept ready for late sowing of late *kharif* crops like Sunflower, Navane, Horsegram and Bajra (even for fodder) and Medium to Long duration Tur crop (2/3 increased seed rate) sowings after receiving sufficient rain.
- Avoid inter culturing after 40 DAS of greengram.
- Inter cultivation is to be done in tur crops for moisture conservation and weed removal.
- Irrigated Cotton sowing/dibbling can be done wherever sufficient rainfall is received with varieties/Hybrids like Bunny, Neeraja, Bhakti, Kanaka etc. for sowing with proper spacing.