



**Composite Agromet Advisory Service Bulletin
for the State of Jharkhand**

BULLETIN NO. 74

Tuesday, 14th September, 2010

For the period: 15th to 19th September 2010

issued by
Meteorological Centre, Ranchi
INDIA METEOROLOGICAL DEPARTMENT

in collaboration with
Birsa Agricultural University, Kanke, Ranchi
&
Department of Agriculture, Govt. of Jharkhand

Meteorological sub-division of the state

As per IMD classification Jharkhand State consisting of twenty four districts is considered as one meteorological subdivision.

Agro Climatic Zones for the State of Jharkhand

S.No.	Agro climatic Zone	Districts	Agromet Field Unit(AMFU)
1	Central & Western Plateau Zone	Ranchi, Khunti, Bokaro, Hazaribag, Ramgarh, Chatara, Garhwa, Palamu, Latehar, Lohardaga, Gumla, Simdega	Ranchi
2	Central and North Eastern Plateau Zone	Dumka, Sahebganj, Godda, Pakur, Deoghar, Giridih, Dhanbad, Jamtara, Koderma	Dumka
3	South Eastern Plateau Zone	West Singhbhum, East Singhbhum, Saraikela	Darisai



DISTRICT LEVEL WEATHER FORECAST
ISSUED ON: 14.09.2010
VALID FOR THE NEXT 5 DAYS

Weather Summary for the period since 0830 hours IST of 10th September, 2010:-

Heavy rainfall occurred at isolated places during 12th to 14th. Rainfall occurred at many places during 12th to 14th & at few places on 11th September, 2010 in Jharkhand. Chief amounts of rainfall reported (in cm): Raidih – 6, Gumla, Pathargama & Mahagama – 3 each on 10th, Barkisuraya – 6, Patana (Sahebganj) – 4, Jharia, Topchanchi, Pathargame, Littipara, Amarpara, Sarwan & Bengabad – 3 each on 11th, Ranchi – 20, Pirtaand, Kanke & Namkum – 8 each, Putki, Gobindpur & Dewipur – 7 each, Pakuria – 6, Nandadih, Jamtara, Silli & Bero – 5 each, Kuru, Sarawn & Tenughat – 4 each, Godda, Tilaiya, Moharo, Pakur, Dhanbad, Balipur, Thakuganjhi, Poraiyahat, Maheshpur & Patana (Sahebganj) – 3 each on 12th, Jamua – 7, Baliapur – 6, Tamar & Kolebira – 5 each, Gobindpur & Chakradharpur – 4 each, Dhanbad, Madhupur & Dumka – 3 each and Ranchi – 11, Ratu & Kanke – 10 each, Gumla – 7, Topchanchi – 4, Tundi, Baghmara & Jamtara – 3 each on 14th.

Summary of observations recorded at Ranchi, Jamshedpur and Daltonganj during 10th to 14th September, 2010:

Stations ---	Ranchi	Jamshedpur	Daltonganj	
Parameters				
Total rainfall (mm)	316.8	2.5	15.0	
Max Temp range (° c)	27-33	32-36	31-35	
Min Temp range (° c)	21-24	25-26	24-28	
Cloud Coverage (octa)	7	7	6	
Relative Humidity (%)	54-98	55-92	51-97	
Wind Direction/ Speed (kmph)	Morning	Westerly	Variable	Calm
		06	06	00
	Evening	Southerly	Variable	Westerly
		08	05	04

Current synoptic condition:

Southwest Monsoon has been active over Jharkhand. A cyclonic circulation lies over Bihar & adjoining Jharkhand extending up to 3.1 km above sea level. The axis of Monsoon trough on sea level charts passes through Jaisalmer, Bikaner, Sawaimadhopur, Kanpur, Daltonganj, Jamshedpur, Bankura & thence to northeast Bay across Bangladesh.

Forecast valid up to 0830 hours IST of 17th September, 2010:-

Warning: Heavy rain may occur at isolated places over Jharkhand during next 24 hrs.

Rain or Thundershowers may occur at many places over Jharkhand.

Outlook for subsequent two days w.e.f. 08.30 hrs IST of 17th September, 2010:-

Little change.

A.WEATHER FORECAST

AMFU :RANCHI (Districts: Ranchi, Khunti, Bokaro, Hazaribag, Ramgarh, Chatara, Garhwa, Palamu, Latehar, Lohardaga, Gumla, Simdega)

DISTRICTS		FORECAST				
		DAY-1 15-09-10	DAY-2 16-09-10	DAY-3 17-09-10	DAY-4 18-09-10	DAY-5 19-09-10
BOKARO	Rainfall (mm)	14	16	8	9	11
	Max Temperature (deg C)	28	28	29	28	26
	Min Temperature (deg C)	24	24	24	23	23
	Total cloud cover (octa)	7	6	7	7	6
	Max Relative Humidity (%)	100	100	100	100	100
	Min Relative Humidity (%)	94	96	92	92	94
	Wind speed (kmph)	6	11	15	18	16
	Wind direction (deg)	110	130	100	110	110
HAZARIBAGH	Rainfall (mm)	12	12	9	6	8
	Max Temperature (deg C)	28	28	29	29	28
	Min Temperature (deg C)	23	23	24	24	23
	Total cloud cover (octa)	7	6	7	6	7
	Max Relative Humidity (%)	99	98	98	98	98
	Min Relative Humidity (%)	95	95	88	85	90
	Wind speed (kmph)	6	12	17	19	19
	Wind direction (deg)	120	130	110	120	120
RAMGARH	Rainfall (mm)	12	12	9	6	8
	Max Temperature (deg C)	28	28	29	29	28
	Min Temperature (deg C)	23	23	24	24	23
	Total cloud cover (octa)	7	6	7	6	7
	Max Relative Humidity (%)	99	98	98	98	98
	Min Relative Humidity (%)	95	95	88	85	90
	Wind speed (kmph)	6	12	17	19	19
	Wind direction (deg)	120	130	110	120	120
CHATRA	Rainfall (mm)	14	16	11	7	8
	Max Temperature (deg C)	29	28	30	31	30
	Min Temperature (deg C)	24	24	24	24	24
	Total cloud cover (octa)	7	6	6	7	6
	Max Relative Humidity (%)	99	96	95	91	92
	Min Relative Humidity (%)	92	91	80	79	84
	Wind speed (kmph)	3	9	13	16	19
	Wind direction (deg)	110	140	120	120	130
RANCHI	Rainfall (mm)	15	15	10	11	10
	Max Temperature (deg C)	28	28	29	28	27
	Min Temperature (deg C)	23	24	24	24	23
	Total cloud cover (octa)	7	7	7	7	7
	Max Relative Humidity (%)	100	100	100	99	99
	Min Relative Humidity (%)	94	98	92	90	97
	Wind speed (kmph)	5	9	14	17	16
	Wind direction (deg)	100	130	100	110	120
KHUNTI	Rainfall (mm)	15	15	10	11	10
	Max Temperature (deg C)	28	28	29	28	27
	Min Temperature (deg C)	23	24	24	24	23
	Total cloud cover (octa)	7	7	7	7	7
	Max Relative Humidity (%)	100	100	100	99	99
	Min Relative Humidity (%)	94	98	92	90	97
	Wind speed (kmph)	5	9	14	17	16
	Wind direction (deg)	100	130	100	110	120

AMFU :RANCHI continued

DISTRICTS		FORECAST				
		DAY-1 15-09-10	DAY-2 16-09-10	DAY-3 17-09-10	DAY-4 18-09-10	DAY-5 19-09-10
GUMLA	Rainfall (mm)	18	20	12	11	13
	Max Temperature (deg C)	28	28	29	29	27
	Min Temperature (deg C)	23	23	23	23	23
	Total cloud cover (octa)	7	7	7	7	7
	Max Relative Humidity (%)	99	100	98	99	99
	Min Relative Humidity (%)	96	97	94	90	98
	Wind speed (kmph)	2	8	12	15	16
	Wind direction (deg)	70	150	80	100	110
SIMDEGA	Rainfall (mm)	18	20	12	11	13
	Max Temperature (deg C)	28	28	29	29	27
	Min Temperature (deg C)	23	23	23	23	23
	Total cloud cover (octa)	7	7	7	7	7
	Max Relative Humidity (%)	99	100	98	99	99
	Min Relative Humidity (%)	96	97	94	90	98
	Wind speed (kmph)	2	8	12	15	16
	Wind direction (deg)	70	150	80	100	110
LOHARDAGA	Rainfall (mm)	16	17	9	9	9
	Max Temperature (deg C)	27	27	28	28	26
	Min Temperature (deg C)	22	22	22	22	22
	Total cloud cover (octa)	7	7	7	7	7
	Max Relative Humidity (%)	100	100	100	100	99
	Min Relative Humidity (%)	92	97	88	87	98
	Wind speed (kmph)	3	8	13	18	19
	Wind direction (deg)	40	160	110	120	130
PALAMAU	Rainfall (mm)	10	15	10	9	8
	Max Temperature (deg C)	32	32	31	31	31
	Min Temperature (deg C)	24	24	24	24	25
	Total cloud cover (octa)	7	6	6	5	5
	Max Relative Humidity (%)	99	97	94	89	88
	Min Relative Humidity (%)	90	89	79	77	77
	Wind speed (kmph)	3	4	9	13	15
	Wind direction (deg)	140	130	100	110	120
GARHWA	Rainfall (mm)	14	20	12	10	8
	Max Temperature (deg C)	29	29	30	31	30
	Min Temperature (deg C)	24	24	24	24	24
	Total cloud cover (octa)	7	6	6	3	4
	Max Relative Humidity (%)	99	99	98	95	89
	Min Relative Humidity (%)	92	91	85	83	86
	Wind speed (kmph)	4	3	8	12	13
	Wind direction (deg)	250	110	90	90	110
LATEHAR	Rainfall (mm)	14	20	12	10	8
	Max Temperature (deg C)	29	29	30	31	30
	Min Temperature (deg C)	24	24	24	24	24
	Total cloud cover (octa)	7	6	6	3	4
	Max Relative Humidity (%)	99	99	98	95	89
	Min Relative Humidity (%)	92	91	85	83	86
	Wind speed (kmph)	4	3	8	12	13
	Wind direction (deg)	250	110	90	90	110

AMFU :DUMKA (Districts: Dumka, Sahebganj, Godda, Pakur, Deoghar, Giridih, Dhanbad, Jamtara, Koderma)

DISTRICTS		FORECAST				
		DAY-1 15-09-10	DAY-2 16-09-10	DAY-3 17-09-10	DAY-4 18-09-10	DAY-5 19-09-10
SAHEBGANJ	Rainfall (mm)	15	15	10	10	9
	Max Temperature (deg C)	32	32	31	31	31
	Min Temperature (deg C)	25	25	24	24	24
	Total cloud cover (octa)	7	7	7	7	6
	Max Relative Humidity (%)	100	99	99	100	99
	Min Relative Humidity (%)	95	90	89	91	94
	Wind speed (kmph)	12	10	15	15	10
	Wind direction (deg)	110	120	110	100	110
GODDA	Rainfall (mm)	21	14	10	11	9
	Max Temperature (deg C)	30	29	30	30	29
	Min Temperature (deg C)	25	25	25	25	25
	Total cloud cover (octa)	7	7	7	6	7
	Max Relative Humidity (%)	98	98	98	98	98
	Min Relative Humidity (%)	92	90	87	91	90
	Wind speed (kmph)	11	10	15	16	14
	Wind direction (deg)	100	120	110	110	110
PAKUR	Rainfall (mm)	15	15	10	12	10
	Max Temperature (deg C)	30	30	29	28	27
	Min Temperature (deg C)	25	25	24	24	24
	Total cloud cover (octa)	7	7	7	6	7
	Max Relative Humidity (%)	99	99	99	100	99
	Min Relative Humidity (%)	93	89	89	89	92
	Wind speed (kmph)	10	10	16	16	10
	Wind direction (deg)	110	120	110	110	110
DUMKA	Rainfall (mm)	15	14	10	12	10
	Max Temperature (deg C)	30	30	29	28	28
	Min Temperature (deg C)	24	24	24	24	24
	Total cloud cover (octa)	7	7	7	7	7
	Max Relative Humidity (%)	100	100	100	100	99
	Min Relative Humidity (%)	93	92	89	91	91
	Wind speed (kmph)	10	12	16	15	14
	Wind direction (deg)	110	130	110	110	120
DEOGHAR	Rainfall (mm)	15	10	8	8	7
	Max Temperature (deg C)	31	31	30	31	30
	Min Temperature (deg C)	24	24	24	24	24
	Total cloud cover (octa)	7	7	7	7	7
	Max Relative Humidity (%)	99	99	99	99	99
	Min Relative Humidity (%)	93	91	86	90	90
	Wind speed (kmph)	10	12	18	18	17
	Wind direction (deg)	120	130	110	110	120
GIRIDIH	Rainfall (mm)	15	10	7	8	7
	Max Temperature (deg C)	32	32	31	31	31
	Min Temperature (deg C)	24	24	24	24	24
	Total cloud cover (octa)	8	8	8	8	8
	Max Relative Humidity (%)	99	99	99	99	99
	Min Relative Humidity (%)	95	92	87	90	90
	Wind speed (kmph)	9	13	17	19	18
	Wind direction (deg)	120	130	110	120	120

AMFU : DUMKA continued

DISTRICTS		FORECAST				
		DAY-1 15-09-10	DAY-2 16-09-10	DAY-3 17-09-10	DAY-4 18-09-10	DAY-5 19-09-10
DHANBAD	Rainfall (mm)	15	10	7	8	7
	Max Temperature (deg C)	28	29	29	28	27
	Min Temperature (deg C)	24	24	24	24	23
	Total cloud cover (octa)	7	7	7	7	7
	Max Relative Humidity (%)	100	100	100	99	100
	Min Relative Humidity (%)	94	95	88	93	94
	Wind speed (kmph)	7	13	17	17	17
	Wind direction (deg)	110	130	100	110	100
JAMTARA	Rainfall (mm)	15	10	7	8	7
	Max Temperature (deg C)	28	29	29	28	27
	Min Temperature (deg C)	24	24	24	24	23
	Total cloud cover (octa)	7	7	7	7	7
	Max Relative Humidity (%)	100	100	100	99	100
	Min Relative Humidity (%)	94	95	88	93	94
	Wind speed (kmph)	7	13	17	17	17
	Wind direction (deg)	110	130	100	110	100
KODERMA	Rainfall (mm)	10	10	8	7	5
	Max Temperature (deg C)	28	28	30	29	28
	Min Temperature (deg C)	24	24	24	24	24
	Total cloud cover (octa)	7	7	7	7	6
	Max Relative Humidity (%)	99	99	98	97	97
	Min Relative Humidity (%)	93	90	86	83	86
	Wind speed (kmph)	9	15	17	18	20
	Wind direction (deg)	120	130	120	120	120

AMFU :DARISAI (Districts: West Singhbhum, East singhbhum, Saraikela

DISTRICTS		FORECAST				
		DAY-1 15-09-10	DAY-2 16-09-10	DAY-3 17-09-10	DAY-4 18-09-10	DAY-5 19-09-10
WEST SINGBHUM	Rainfall (mm)	16	16	12	10	14
	Max Temperature (deg C)	28	29	29	30	28
	Min Temperature (deg C)	24	24	24	24	23
	Total cloud cover (octa)	7	7	7	7	7
	Max Relative Humidity (%)	100	99	98	97	98
	Min Relative Humidity (%)	93	90	85	82	94
	Wind speed (kmph)	3	4	12	10	10
	Wind direction (deg)	130	120	80	100	120
EAST SINGBHUM	Rainfall (mm)	15	16	7	9	8
	Max Temperature (deg C)	32	32	30	30	30
	Min Temperature (deg C)	24	24	24	24	24
	Total cloud cover (octa)	7	7	7	7	7
	Max Relative Humidity (%)	99	100	99	99	99
	Min Relative Humidity (%)	91	91	86	90	96
	Wind speed (kmph)	4	12	13	17	14
	Wind direction (deg)	130	120	90	110	120
SARAIKELA	Rainfall (mm)	15	16	7	9	8
	Max Temperature (deg C)	32	32	30	30	30
	Min Temperature (deg C)	24	24	24	24	24
	Total cloud cover (octa)	7	7	7	7	7
	Max Relative Humidity (%)	99	100	99	99	99
	Min Relative Humidity (%)	91	91	86	90	96
	Wind speed (kmph)	4	12	13	17	14
	Wind direction (deg)	130	120	90	110	120

B. AGRO-ADVISORIES:-

AMFU : Ranchi, Dumka & Darisai (i.e for all Districts of Jharkhand)

Contingency plan for Jharkhnad state are

1. Sowing of Kulthi (Seed @ 20 kg/Acre. R x R 30 cm.) Toria (Seed @ 2 kg/acre. R x R 30 cm) & Nizer can also be taken. Varieties of Kulthi: Madhu & Birsa Kulthi – 1, Varieties of Toria: T – 9, PT – 303 seed treatment with carbondigene (Bavistin) 2 gm/kg of seed), Varieties of Nizer: Birsa Nizer – 1 (Seed @ 8 kg/Acre (R x R 30 cm. plant to plant 10-15 cm).
2. In vegetables early crop of Lady finger, Lobia & French Bean are recommended. Preparation of Nursery for Tomato, Cabbage & Cauliflower can also be undertaken.

Upland: Interculturing must be done in Maize, Groundnut, Arahar & Marua. If there is attack of termite, spraying of chloropyriphos 2.5 ml/litre of water should be done.

Paddy: Spraying with Gavestin 1 gm/litre of water against blast of paddy, if some insects seen in the seedling chloropyriphos 1 ml/litre of water should be spraying. If there is attack of swarming caterpillars spraying with Nuvan or Nureldie 3 ml/litre of water should be applied.

Pulses: Urad- Varieties- T-9, Pant, PU-19, Birsa Urad-1. Seed rate- 30kg/hect

Mung- Varieties- K-851, Pusa Visal. Seed rate- 30kg/hect. Fertilizer dose for Pulses- Urea- 12kg, DAP-112kg, MOP-40kg per hectare. Seed treated with Carbonydazine 50% WP or Mencozeb 75% WP- 2gm/kg of seed. Farmers are advised to continue sowing of Urad.

Vegetable Cauliflower: Varieties are – Pusa Dipawali, Patna Early, Hazipur Agat, Pusa Ketaki, extra early. These varieties should be sown in raised nursery and seed should be treated with Carbondazium 1.5 – 2 gm or Tichograma 5 gm/kg of seed.

Brinjal :

Varieties are: Rajendra Baigan, Rajendra Annapurna, Pant Rituraj, Pant Samrat, Swarn Pratibha & Arka Navanit), Chilli, Tomato can be planted.

Farmers are advised the sowing of Maize, Pulses (Urad, Moong & Kulthi), Oilseed (Nizer & Toria) on vacant land.

Potato: Varieties are: Kufri Chip Sona, Kufri Pokharaj, Kufri Badsah, Kufri Kuber, Kufri Ashok, Kufri Lalima, Kufri Bahar, Altimus Seed @ 8 quintal/acre. Distance R x R 50 cm & plant to plant 20 cm. Fertiliser: Nitrogen – 48 kg, Phosphorus – 40 kg, MOP – 40 kg. Seed should be treated with Diethen M – 45 @ 2.5 gm/litre of water.

Statistics of crop coverage for The state of Jharkhand up to 07.09.2010 (in 000 Hactare) is given below:

Paddy		%	Maize		%	Pulses		%	Oilseed		%
Target	Coverage		Target	Coverage		Target	Coverage		Target	Coverage	
1692.000	683.555	40	280.000	196.948	70	381.000	204.804	54	75.000	26.037	35