



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

BULLETIN NO. 64

Tuesday, 10th August, 2010

For the period: 11th to 15th August 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: 10.08.2010
VALID FOR THE NEXT 5 DAYS

Weather Summary for the period since 0830 hours IST of 06th August, 2010:-

Heavy rainfall occurred at an isolated place on 10th. Rainfall occurred at a few places on 07th & 08th & at an isolated place on 09th & 10th August, 2010 in Jharkhand. Chief amount of rainfall reported (in cm): Echak – 10, Barkatta – 10 & Godda – 4 on 10th, Barkagaon – 5 on 8th.

Summary of observations recorded at Ranchi, Jamshedpur and Daltonganj during 07th to 10th August, 2010:

| Stations --- | Ranchi | Jamshedpur | Daltonganj |
|---------------------------------|----------------|------------|------------|
| Parameters | | | |
| Total rainfall (mm) | 13.7 | 5.6 | 1.8 |
| Max Temp range (° c) | 27-33 | 31-36 | 32-34 |
| Min Temp range (° c) | 22-25 | 25-27 | 25-27 |
| Cloud Coverage (octa) | 6 | 5 | 5 |
| Relative Humidity (%) | 50-98 | 51-95 | 59-95 |
| Wind Direction/ Speed (kmph) | Morning | Calm | Westerly |
| | | 00 | 05 |
| | Evening | Variable | Easterly |
| | | 04 | 03 |

Current synoptic condition:

A cyclonic circulation lies over northwest Bay & adjoining areas extending up to 1.5 & 3.6 km above sea level. The axis of Monsoon trough on sea level charts passes through Patiyala, Delhi, Firozabad, Gaya & thence to east central Bay across northwest Bay.

Forecast valid up to 0830 hours IST of 13th August, 2010:-

Rain or Thundershowers may occur at a few places over Jharkhand.

Outlook for subsequent two days w.e.f. 08.30 hrs IST of 13th August, 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 11-08-10 | DAY-2 12-08-10 | DAY-3 13-08-10 | DAY-4 14-08-10 | DAY-5 15-08-10 |
| BOKARO | Rainfall (mm) | 5 | 9 | 8 | 8 | 8 |
| | Max Temperature (deg C) | 30 | 31 | 31 | 30 | 32 |
| | Min Temperature (deg C) | 25 | 24 | 25 | 25 | 25 |
| | Total cloud cover (octa) | 6 | 6 | 5 | 6 | 5 |
| | Max Relative Humidity (%) | 97 | 100 | 99 | 99 | 99 |
| | Min Relative Humidity (%) | 75 | 77 | 78 | 76 | 74 |
| | Wind speed (kmph) | 2 | 2 | 4 | 4 | 2 |
| | Wind direction (deg) | 230 | 250 | 100 | 100 | 140 |
| HAZARIBAGH | Rainfall (mm) | 5 | 8 | 8 | 7 | 7 |
| | Max Temperature (deg C) | 30 | 30 | 30 | 30 | 31 |
| | Min Temperature (deg C) | 24 | 24 | 24 | 24 | 24 |
| | Total cloud cover (octa) | 7 | 6 | 6 | 7 | 6 |
| | Max Relative Humidity (%) | 96 | 98 | 97 | 98 | 97 |
| | Min Relative Humidity (%) | 76 | 75 | 82 | 75 | 74 |
| | Wind speed (kmph) | 2 | 4 | 2 | 6 | 6 |
| | Wind direction (deg) | 220 | 170 | 120 | 120 | 160 |
| RAMGARH | Rainfall (mm) | 5 | 8 | 8 | 7 | 7 |
| | Max Temperature (deg C) | 30 | 30 | 30 | 30 | 31 |
| | Min Temperature (deg C) | 24 | 24 | 24 | 24 | 24 |
| | Total cloud cover (octa) | 7 | 6 | 6 | 7 | 6 |
| | Max Relative Humidity (%) | 96 | 98 | 97 | 98 | 97 |
| | Min Relative Humidity (%) | 76 | 75 | 82 | 75 | 74 |
| | Wind speed (kmph) | 2 | 4 | 2 | 6 | 6 |
| | Wind direction (deg) | 220 | 170 | 120 | 120 | 160 |
| CHATRA | Rainfall (mm) | 6 | 8 | 10 | 6 | 8 |
| | Max Temperature (deg C) | 30 | 31 | 31 | 31 | 31 |
| | Min Temperature (deg C) | 25 | 25 | 24 | 24 | 25 |
| | Total cloud cover (octa) | 6 | 5 | 5 | 6 | 6 |
| | Max Relative Humidity (%) | 94 | 99 | 97 | 97 | 94 |
| | Min Relative Humidity (%) | 75 | 75 | 84 | 73 | 78 |
| | Wind speed (kmph) | 4 | 4 | 4 | 6 | 9 |
| | Wind direction (deg) | 240 | 170 | 150 | 130 | 160 |
| RANCHI | Rainfall (mm) | 9 | 10 | 8 | 10 | 10 |
| | Max Temperature (deg C) | 32 | 31 | 31 | 31 | 32 |
| | Min Temperature (deg C) | 25 | 24 | 24 | 24 | 25 |
| | Total cloud cover (octa) | 6 | 8 | 6 | 5 | 5 |
| | Max Relative Humidity (%) | 97 | 100 | 98 | 100 | 99 |
| | Min Relative Humidity (%) | 76 | 78 | 84 | 73 | 77 |
| | Wind speed (kmph) | 4 | 4 | 4 | 4 | 4 |
| | Wind direction (deg) | 260 | 250 | 190 | 100 | 190 |
| KHUNTI | Rainfall (mm) | 9 | 10 | 8 | 10 | 10 |
| | Max Temperature (deg C) | 32 | 31 | 31 | 31 | 32 |
| | Min Temperature (deg C) | 25 | 24 | 24 | 24 | 25 |
| | Total cloud cover (octa) | 6 | 8 | 6 | 5 | 5 |
| | Max Relative Humidity (%) | 97 | 100 | 98 | 100 | 99 |
| | Min Relative Humidity (%) | 76 | 78 | 84 | 73 | 77 |
| | Wind speed (kmph) | 4 | 4 | 4 | 4 | 4 |
| | Wind direction (deg) | 260 | 250 | 190 | 100 | 190 |

AMFU :RANCHI continued

| DISTRICTS | | FORECAST | | | | |
|------------|---------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | DAY-1 11-08-10 | DAY-2 12-08-10 | DAY-3 13-08-10 | DAY-4 14-08-10 | DAY-5 15-08-10 |
| PARAMETERS | | | | | | |
| GUMLA | Rainfall (mm) | 10 | 10 | 8 | 13 | 12 |
| | Max Temperature (deg C) | 31 | 31 | 30 | 30 | 31 |
| | Min Temperature (deg C) | 24 | 24 | 24 | 24 | 24 |
| | Total cloud cover (octa) | 6 | 6 | 5 | 5 | 7 |
| | Max Relative Humidity (%) | 100 | 100 | 100 | 98 | 98 |
| | Min Relative Humidity (%) | 75 | 83 | 82 | 74 | 78 |
| | Wind speed (kmph) | 2 | 0 | 4 | 4 | 2 |
| | Wind direction (deg) | 220 | 270 | 140 | 70 | 80 |
| SIMDEGA | Rainfall (mm) | 10 | 10 | 8 | 13 | 12 |
| | Max Temperature (deg C) | 31 | 31 | 30 | 30 | 31 |
| | Min Temperature (deg C) | 24 | 24 | 24 | 24 | 24 |
| | Total cloud cover (octa) | 6 | 6 | 5 | 5 | 7 |
| | Max Relative Humidity (%) | 100 | 100 | 100 | 98 | 98 |
| | Min Relative Humidity (%) | 75 | 83 | 82 | 74 | 78 |
| | Wind speed (kmph) | 2 | 0 | 4 | 4 | 2 |
| | Wind direction (deg) | 220 | 270 | 140 | 70 | 80 |
| LOHARDAGA | Rainfall (mm) | 8 | 10 | 8 | 10 | 9 |
| | Max Temperature (deg C) | 32 | 32 | 32 | 32 | 32 |
| | Min Temperature (deg C) | 22 | 23 | 23 | 23 | 23 |
| | Total cloud cover (octa) | 5 | 6 | 6 | 5 | 7 |
| | Max Relative Humidity (%) | 99 | 100 | 99 | 100 | 99 |
| | Min Relative Humidity (%) | 78 | 77 | 83 | 74 | 80 |
| | Wind speed (kmph) | 4 | 4 | 4 | 6 | 6 |
| | Wind direction (deg) | 240 | 190 | 190 | 140 | 180 |
| PALAMAU | Rainfall (mm) | 9 | 9 | 10 | 9 | 11 |
| | Max Temperature (deg C) | 32 | 32 | 31 | 31 | 32 |
| | Min Temperature (deg C) | 26 | 26 | 26 | 26 | 26 |
| | Total cloud cover (octa) | 6 | 6 | 6 | 5 | 5 |
| | Max Relative Humidity (%) | 94 | 99 | 98 | 98 | 95 |
| | Min Relative Humidity (%) | 74 | 76 | 80 | 73 | 77 |
| | Wind speed (kmph) | 4 | 4 | 2 | 4 | 7 |
| | Wind direction (deg) | 270 | 200 | 150 | 110 | 150 |
| GARHWA | Rainfall (mm) | 8 | 8 | 10 | 10 | 12 |
| | Max Temperature (deg C) | 32 | 32 | 31 | 31 | 32 |
| | Min Temperature (deg C) | 26 | 25 | 25 | 25 | 25 |
| | Total cloud cover (octa) | 5 | 6 | 5 | 6 | 5 |
| | Max Relative Humidity (%) | 94 | 99 | 98 | 99 | 98 |
| | Min Relative Humidity (%) | 74 | 77 | 75 | 74 | 78 |
| | Wind speed (kmph) | 4 | 4 | 2 | 2 | 4 |
| | Wind direction (deg) | 280 | 270 | 190 | 310 | 190 |
| LATEHAR | Rainfall (mm) | 8 | 8 | 10 | 10 | 12 |
| | Max Temperature (deg C) | 32 | 32 | 31 | 31 | 32 |
| | Min Temperature (deg C) | 26 | 25 | 25 | 25 | 25 |
| | Total cloud cover (octa) | 5 | 6 | 5 | 6 | 5 |
| | Max Relative Humidity (%) | 94 | 99 | 98 | 99 | 98 |
| | Min Relative Humidity (%) | 74 | 77 | 75 | 74 | 78 |
| | Wind speed (kmph) | 4 | 4 | 2 | 2 | 4 |
| | Wind direction (deg) | 280 | 270 | 190 | 310 | 190 |

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

| DISTRICTS | | FORECAST | | | | |
|-----------|---------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | DAY-1 11-08-10 | DAY-2 12-08-10 | DAY-3 13-08-10 | DAY-4 14-08-10 | DAY-5 15-08-10 |
| SAHEBGANJ | Rainfall (mm) | 7 | 10 | 7 | 7 | 5 |
| | Max Temperature (deg C) | 31 | 32 | 32 | 31 | 32 |
| | Min Temperature (deg C) | 26 | 25 | 26 | 26 | 26 |
| | Total cloud cover (octa) | 5 | 7 | 7 | 5 | 5 |
| | Max Relative Humidity (%) | 99 | 98 | 99 | 99 | 99 |
| | Min Relative Humidity (%) | 80 | 81 | 79 | 81 | 77 |
| | Wind speed (kmph) | 6 | 4 | 6 | 6 | 7 |
| | Wind direction (deg) | 120 | 120 | 90 | 140 | 120 |
| GODDA | Rainfall (mm) | 9 | 10 | 10 | 9 | 8 |
| | Max Temperature (deg C) | 31 | 31 | 32 | 31 | 33 |
| | Min Temperature (deg C) | 26 | 26 | 26 | 26 | 26 |
| | Total cloud cover (octa) | 5 | 7 | 7 | 5 | 5 |
| | Max Relative Humidity (%) | 99 | 97 | 98 | 98 | 97 |
| | Min Relative Humidity (%) | 80 | 80 | 80 | 79 | 78 |
| | Wind speed (kmph) | 4 | 6 | 9 | 4 | 6 |
| | Wind direction (deg) | 90 | 140 | 100 | 110 | 110 |
| PAKUR | Rainfall (mm) | 7 | 10 | 4 | 7 | 5 |
| | Max Temperature (deg C) | 31 | 32 | 32 | 31 | 32 |
| | Min Temperature (deg C) | 26 | 25 | 25 | 26 | 26 |
| | Total cloud cover (octa) | 5 | 7 | 6 | 5 | 6 |
| | Max Relative Humidity (%) | 99 | 96 | 99 | 99 | 97 |
| | Min Relative Humidity (%) | 79 | 80 | 76 | 79 | 75 |
| | Wind speed (kmph) | 4 | 2 | 4 | 4 | 4 |
| | Wind direction (deg) | 120 | 110 | 100 | 100 | 140 |
| DUMKA | Rainfall (mm) | 6 | 10 | 4 | 6 | 6 |
| | Max Temperature (deg C) | 31 | 31 | 32 | 32 | 32 |
| | Min Temperature (deg C) | 26 | 25 | 25 | 26 | 26 |
| | Total cloud cover (octa) | 6 | 6 | 6 | 7 | 5 |
| | Max Relative Humidity (%) | 99 | 97 | 98 | 98 | 98 |
| | Min Relative Humidity (%) | 78 | 80 | 76 | 79 | 77 |
| | Wind speed (kmph) | 4 | 4 | 6 | 4 | 6 |
| | Wind direction (deg) | 140 | 120 | 140 | 100 | 150 |
| DEOGHAR | Rainfall (mm) | 7 | 9 | 6 | 7 | 8 |
| | Max Temperature (deg C) | 32 | 32 | 30 | 31 | 31 |
| | Min Temperature (deg C) | 25 | 25 | 25 | 25 | 25 |
| | Total cloud cover (octa) | 7 | 6 | 6 | 5 | 6 |
| | Max Relative Humidity (%) | 99 | 99 | 99 | 98 | 99 |
| | Min Relative Humidity (%) | 78 | 77 | 79 | 80 | 78 |
| | Wind speed (kmph) | 4 | 6 | 7 | 6 | 7 |
| | Wind direction (deg) | 180 | 210 | 160 | 120 | 160 |
| GIRIDIH | Rainfall (mm) | 7 | 10 | 9 | 10 | 10 |
| | Max Temperature (deg C) | 30 | 30 | 30 | 31 | 31 |
| | Min Temperature (deg C) | 25 | 25 | 25 | 25 | 25 |
| | Total cloud cover (octa) | 7 | 6 | 6 | 5 | 5 |
| | Max Relative Humidity (%) | 99 | 99 | 99 | 99 | 99 |
| | Min Relative Humidity (%) | 77 | 77 | 81 | 79 | 75 |
| | Wind speed (kmph) | 4 | 6 | 7 | 7 | 7 |
| | Wind direction (deg) | 140 | 200 | 150 | 120 | 160 |

AMFU : DUMKA continued

| DISTRICTS | | FORECAST | | | | |
|-----------|---------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | DAY-1 11-08-10 | DAY-2 12-08-10 | DAY-3 13-08-10 | DAY-4 14-08-10 | DAY-5 15-08-10 |
| DHANBAD | Rainfall (mm) | 5 | 8 | 6 | 7 | 7 |
| | Max Temperature (deg C) | 30 | 31 | 31 | 31 | 32 |
| | Min Temperature (deg C) | 25 | 25 | 25 | 25 | 25 |
| | Total cloud cover (octa) | 6 | 6 | 5 | 7 | 5 |
| | Max Relative Humidity (%) | 100 | 100 | 99 | 100 | 99 |
| | Min Relative Humidity (%) | 76 | 81 | 79 | 79 | 74 |
| | Wind speed (kmph) | 2 | 4 | 7 | 4 | 4 |
| | Wind direction (deg) | 110 | 250 | 130 | 100 | 130 |
| JAMTARA | Rainfall (mm) | 5 | 8 | 6 | 7 | 7 |
| | Max Temperature (deg C) | 30 | 31 | 31 | 31 | 32 |
| | Min Temperature (deg C) | 25 | 25 | 25 | 25 | 25 |
| | Total cloud cover (octa) | 6 | 6 | 5 | 7 | 5 |
| | Max Relative Humidity (%) | 100 | 100 | 99 | 100 | 99 |
| | Min Relative Humidity (%) | 76 | 81 | 79 | 79 | 74 |
| | Wind speed (kmph) | 2 | 4 | 7 | 4 | 4 |
| | Wind direction (deg) | 110 | 250 | 130 | 100 | 130 |
| KODERMA | Rainfall (mm) | 5 | 8 | 7 | 9 | 9 |
| | Max Temperature (deg C) | 30 | 30 | 30 | 31 | 31 |
| | Min Temperature (deg C) | 25 | 24 | 24 | 25 | 25 |
| | Total cloud cover (octa) | 6 | 6 | 7 | 7 | 6 |
| | Max Relative Humidity (%) | 97 | 99 | 98 | 98 | 98 |
| | Min Relative Humidity (%) | 75 | 76 | 81 | 79 | 74 |
| | Wind speed (kmph) | 4 | 7 | 4 | 7 | 9 |
| | Wind direction (deg) | 170 | 170 | 150 | 120 | 160 |

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

| DISTRICTS | | FORECAST | | | | |
|------------------|---------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | DAY-1 11-08-10 | DAY-2 12-08-10 | DAY-3 13-08-10 | DAY-4 14-08-10 | DAY-5 15-08-10 |
| WEST SINGBHUM | Rainfall (mm) | 8 | 10 | 7 | 9 | 10 |
| | Max Temperature (deg C) | 31 | 31 | 32 | 32 | 32 |
| | Min Temperature (deg C) | 25 | 24 | 24 | 25 | 25 |
| | Total cloud cover (octa) | 7 | 6 | 7 | 5 | 7 |
| | Max Relative Humidity (%) | 98 | 99 | 99 | 98 | 97 |
| | Min Relative Humidity (%) | 73 | 84 | 83 | 76 | 79 |
| | Wind speed (kmph) | 4 | 2 | 4 | 4 | 2 |
| | Wind direction (deg) | 220 | 290 | 140 | 100 | 210 |
| EAST SINGBHUM | Rainfall (mm) | 6 | 8 | 5 | 7 | 6 |
| | Max Temperature (deg C) | 35 | 35 | 33 | 32 | 32 |
| | Min Temperature (deg C) | 25 | 25 | 24 | 25 | 25 |
| | Total cloud cover (octa) | 7 | 6 | 5 | 6 | 6 |
| | Max Relative Humidity (%) | 96 | 99 | 99 | 99 | 99 |
| | Min Relative Humidity (%) | 73 | 83 | 82 | 79 | 78 |
| | Wind speed (kmph) | 2 | 2 | 4 | 2 | 4 |
| | Wind direction (deg) | 260 | 290 | 100 | 90 | 140 |
| SARAIKELA | Rainfall (mm) | 6 | 8 | 5 | 7 | 6 |
| | Max Temperature (deg C) | 35 | 35 | 33 | 32 | 32 |
| | Min Temperature (deg C) | 25 | 25 | 24 | 25 | 25 |
| | Total cloud cover (octa) | 7 | 6 | 5 | 6 | 6 |
| | Max Relative Humidity (%) | 96 | 99 | 99 | 99 | 99 |
| | Min Relative Humidity (%) | 73 | 83 | 82 | 79 | 78 |
| | Wind speed (kmph) | 2 | 2 | 4 | 2 | 4 |
| | Wind direction (deg) | 260 | 290 | 100 | 90 | 140 |

B. AGRO-ADVISORIES:-

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

Upland: Interculturing must be done in Maize, Groundnut, Arhar & Marua sown in upland. If there is attack of termite, spraying of chloropyriphos 2.5 ml/litre of water should be done. Farmers are suggested to start the sowing of Kulthi & Nizer. Varieties of Kulti: Birsa Kulthi -1 (Seed @ 8 kg/Acre. RxR 30 cm.) Varieties of Nizer: Birsa Nizer -1 (RxR 30 cm. plant to plant 10-15 cm).

Paddy: Seedling of 15-20 days should be transplanted immediately. For low land half dose of urea i.e. 42 kg, full dose of SSP i.e. 52 kg & full dose of MOP i.e. 27 kg / acre should be applied after puddling. Distance between R x R 20 cm & plant to plant 15 cm @ 2-3 seedling /heel should be maintained. 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: Arhar- Varieties- Birsa Arhar-1, Bahar, Upas. Seed rate- 20kg/hect.

Urad- Varieties- T-9, Pant, U-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 Carbendazim 50% WP or Mencozeb 75% WP- 2gm/kg of seed. Farmers are advised to continue sowing of Urad.

Oilseed Groundnut: Varieties-AK-12-24, Spanish, Birsa Bold-1, Birsa G/N-1,2,3, BG-2, J 1-24, Vargina. Seedrate-75 to 80 kg/hect. Fertiliser-Urea-12 kg, DAP- 112kg MOP-40kg/hect.

Maize: After 25-30 days plants should be intercultured. Top dressing with urea 30 kg/acre after tussling stage rest 25 kg urea/acre should be applied.

Vegetable Cauliflower: Varieties are – Pusa Dipawali, Patna Early, Hazipur extra early. These varieties should be sown in raised nursery and seed should be treated with Carbendazim 1.5 – 2 gm or Tichogramma 5 gm/kg of seed. Crops of Brinjal, Chilli, Tomato can be planted.

Statistics of crop coverage for The state of Jharkhand up to 09.08.2010 (in 000 Hactare) is given below:

| Paddy | | | Maize | | | Pulses | | | Oilseed | | |
|----------|----------|----|---------|----------|----|---------|----------|----|---------|----------|----|
| Target | Coverage | % | Target | Coverage | % | Target | Coverage | % | Target | Coverage | % |
| 1692.000 | 483.100 | 29 | 280.000 | 184.029 | 66 | 381.000 | 156.672 | 41 | 75.000 | 20.209 | 27 |

(S. Hemrom)
Deputy Director (Plant Protection)
State Agriculture Dept, Ranchi.

Forwarded to : Director Agriculture, Ranchi, Jharkhand/Director AIR/Director D.D., Ranchi.
M.C.RANCHI UOI No. RNC-DAAS/II/ /10.08.2010

Forwarded to DDGM (Agrimet), Pune)
M.C.RANCHI UOI No. RNC-DAAS/II/ /10.08.2010

(G.K.Mohanty)
Meteorological Centre, Ranchi

(G.K.Mohanty)
Director