

NORMALLY EXPECTED WEATHER DURING AUGUST, 2012

During August monsoon rain bearing systems will produce precipitation. These rains are of immense importance for the farmers in relation to present and future crop requirements. In the absence of proper land management, the intense rains may erode the upper soil layers and fertility of the soil would be badly affected. If soil and moisture conservation measures are exercised, the farmers of the area could be benefited through available moisture for sowing and early growth of Rabi crops. Due to weaker pace of monsoon this year, the rain are expected to remain 30% below normal in most of the agricultural plains of Pakistan with occasionally heavy rains in some parts.

The probability of occurrence of rainfall over Potohar plains is given below:-

Amount Dates	PERCENTAGE PROBABILITY OF OCCURRENCE OF DIFFERENT AMOUNT OFF RAINFALL IN AUGUST					
	1-5	6-10	11-16	17-20	21-25	26-31
10 mm	71	81	78	69	75	64
15 mm	68	74	73	66	70	52
25 mm	56	68	58	56	49	40

The evaporative demand of the atmosphere would decrease as compared to July due to increased cloudiness, less solar radiation intensity and increase level of humidity. ETo values would range from 4 to 7 mm/day. The maximum ETo values would take place over agricultural areas along 30° latitude of the country. The mean daily relative humidity is expected to range from 60 to 75% except high agricultural plains of Balochistan where it may be around 40%.

The mean daily temperatures may range between 31 and 33 °C over Sindh, Khyber Pakhtoonkhawa, central and southern Punjab, Northern Punjab and high agricultural plains of Balochistan may experience it from 26 to 29 °C. The mean maximum would be in upper 30°C and mean minimum in upper 20°C except high agricultural plains of Balochistan where it would be around 18 °C. The occurrence of hygrothermal stress is not expected because of higher humidity level. The upper soil layers would be slightly cooler than July due to relatively cooler crop environment.

The daily bright sunshine duration during August is expected to range between 8 and 10 hrs throughout the country. The solar intensity will vary from 20 to 24 MJ/M²/day. Mean daily wind speeds will range between 3 and 12 Km/hr. The prevailing wind direction may vary from East to South.

Among the Kharif crops, most important crops are rice, cotton and sugarcane. All of them may be approaching their reproductive stage of development, i.e., the period of maximum water demand. Due to rains in northern parts of the country, soil moisture will be surplus in northern Punjab and adjoining KPK.

The water requirement of a full canopied, healthy growing crop is given below:

S.No	Region	Water Requirement	
		(mm)	Cubic Meter/Hectare
1	Central Punjab & adjoining KPK	130-160	1300-1600
2	Southern Punjab Upper Sindh & adjoining Balochistan	170-200	1700-2000
3	Lower Sindh & high plains of Balochistan	120-135	1200-1350