

### **NORMALLY EXPECTED WEATHER DURING APRIL, 2012**

Westerly rain bearing systems will remain active over Pakistan with the decreasing frequency of occurrence as compared to the peak winter months. The northern parts of the country will be mainly influenced by these weather systems and frequency of precipitation days would be greater in these areas as compared to other parts of the country. Some precipitation associated with thunderstorm/ hailstorm is also expected due to local weather developments in the northern parts. However, due to increased solar heating, mesoscale convective activity dominates over the plains and mountainous areas. As a result, sometimes heavy downpour associated with hailstorm and thunderstorm occurs with localized characteristics. Occasional dust storm or gusty winds are the common features of April. The probability of occurrence of rainfall during April over Potohar plains is given below:

AMOUNTS/ DATES	PERCENTAGE PROBABILITY OF OCCURRENCE OF DIFFERENT AMOUNTS OF RAINFALL IN APRIL					
	1-5	6-10	11-15	16-20	21-25	26-30
<b>10 mm</b>	36	35	21	18	16	30
<b>15 mm</b>	25	23	18	16	06	21
<b>25 mm</b>	10	12	12	12	03	09

The evaporative demand of the atmosphere is expected to increase as compared to March by 1 to 2 mm/day because of increasing heating trend. The ETo values may range between 4.5 and 6.5 mm/day following a uniform increasing trend from North to South. The mean daily relative humidity is likely to range from 40 to 50% in most of the agricultural plains of the country except southern Punjab and upper Sindh where it may be around 35%.

Mean daily air temperatures may range between 23°C and 30°C over most of the low elevation agricultural plains of the country whereas in high agricultural plains of Balochistan, it may be around 17°C. The mean daily maximum temperatures are expected to range from 30 to 39°C following a southward increasing trend except Quetta valley where it may remain around 25°C. The mean minimum temperatures are likely to be in the range of 15 to 23°C except high agricultural plains of Balochistan where it may remain around 8°C.

The mean daily duration of bright sunshine is expected to range from 8 to 10 hours over most of the agricultural plains of the country. The intensity of solar radiation may range from 19 to 21 MJ/M<sup>2</sup>/day. The mean daytime wind speeds are likely to range from 4-8 Km/hour over most of agricultural areas of the country except high agricultural plains of Balochistan where it may average about 11 Km/hour.

The water requirement of full canopied, healthy and normally growing crops is given below for different agro-climates of the country. The Rabi crops in the field may be close to maturity in low elevation agricultural plains, therefore, no irrigation is recommended in such areas. At higher elevations, the crops may be around early reproductive stage, where they would require maximum amounts of water.

S.No	Region	Water Requirement	
		(mm)	Cubic Meter/Hectare
1	Northern KPK, Northern Punjab and high plains of Balochistan	120-150	1200-1500
2	Central Punjab and Southern KPK	150-165	1500-1650
3	Southern Punjab & Sindh	170-190	1700-1900