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

Generally June is the hottest and driest month except some pre-monsoon showers. Towards the end of the month seasonal low will fully mature over Balochistan and adjoining areas. Usually northern parts of the country first experience the onset of monsoon and hence the frequency of occurrence of rain over northern parts of Punjab is greater than other parts of the country.

Two to three troughs of westerly low pressure waves are expected to pass across central Asian countries and their trough may effect northern part of the country. Under the influence of these westerly troughs and pre-monsoon system, more than 50mm of rainfall is expected in the north of the country and Potohar region, 25 to 30mm of rain fall in central Punjab and about 10mm rainfall is expected over Khyber Pakhtoonkhawa, lower Sindh and southern Punjab. Upper Sindh and most of Balochistan may remain partially dry. The probability of occurrence of rainfall during June over Potohar plains is given below:-

AMOUNT/DATES	PERCENTAGE PROBABILITY OF OCCURRENCE OF DIFFERENT AMOUNT OF RAINFALL IN JUNE					
	1-5	6-10	11-16	17-20	21-25	26-30
10 mm	6	13	30	26	36	41
15 mm	5	10	27	13	30	38
25 mm	1	4	21	8	16	25

Due to intense heating and relatively clear skies, the evaporative demand of atmosphere will increase sharply and may range from 7.5 mm/day to 8.5 mm/day over most of the agricultural areas of the country except southern Khyber Pakhtoonkhawa, high agriculture plains of Balochistan and extreme northern parts of the country where it may remain close to 7 mm/day.

Mean maximum temperature may remain above 40 °C over most of the agricultural plains of the country. However, in high plains of Balochistan, it may remain close to 35 °C. Highest maximum temperature may reach to upper forties over most of agricultural plains of the country. Due to lower humidity level and high temperatures, the frequency of occurrence of stress conditions for crops may increase considerably. Irrigation will be the only remedy to decrease the effect of stress conditions to crops. The mean minimum temperature may range from 25-28 °C throughout the country except high plains of Balochistan where it may average to 16 °C.

The duration of bright sunshine may remain greater than 10 hrs/day in northern Khyber Pakhtoonkhawa and high agricultural plains of Balochistan. In rest of the country it may range from 8.5 hrs/day to 9.5 hrs/day. The intensity of solar radiation may decrease over most of agricultural plains of the country due to haze, dust in suspension and increased cloudiness. Towards the end of the month it may range between 22 MJ/M²/day over most of the country.

However, in northern Khyber Pakhtoonkhawa and Rawalpindi region, it may average to  $24.3 \, \text{MJ/M}^2/\text{day}$  due to relatively clear skies. Maximum intensity of Solar Radiation may be experienced at Quetta valley amounting to  $26.3 \, \text{MJ/M}^2/\text{day}$ .

Gusty wind and dustroms will be normal phenomena during the month. However, mean wind speed may remain below 10 Km/hr over most of the agricultural plains of the country except lower Sindh, where it may average to 14Km/hr. In high agricultural plains of Balochistan, wind speed may remain above 10 Km/hr. Mostly southwesterly wind may prevail over Sindh and adjoining Balochistan. However, above 30 degree latitude, southerly and southeasterly wind may prevail during the month.

The water requirement of disease free full canopied crop growing is given as under:-

S. No	Region	Water Requirement		
5.110	Region	(mm)	Cubic Meter/Hectare	
1	Northern Punjab, KPK and high plains of Balochistan	180-210	1800-2100	
2	Southern Punjab and Upper Sindh	220-240	2200-2400	
3	Lower Sindh and Southern Balochistan	250-260	2500-2600	