

### **TEMPERATURE REGIME DURING FEBRUARY 2012**

Temperature plays vital role in the growth and development of crops. Thermal regime in this month remained normal or slightly above normal in most of the agricultural plains of the country.

Mean daily temperature remained normal to below normal (by 1-4°C) in most of the agricultural plains of the country except in high elevated agricultural plains of Skardu, where it remained slightly above normal by 1°C. Mean daily temperature ranged 11 - 13°C in Khyber Pakhtoonkhawa, 11 to 14°C in Potohar plateau, in remaining parts of Punjab it ranged 13-14°C, in Sindh it ranged 16 to 17°C, in Gilgit Baltistan region it ranged 1 to 6°C and was observed 3°C in the high elevated agricultural plains of Balochistan represented by Quetta valley.

The day time temperature represented by mean maximum also remained normal to below normal by 1-3°C in most of the agricultural plains. The highest maximum temperature in the agricultural plains of the country was recorded 32.5°C at Tandojam. The night time temperature represented by mean minimum increased above normal by 4 to 8°C in the agricultural plains of the country. The lowest minimum temperature was recorded

-7.5°C at Skardu.

Maximum number of stress days with minimum temperature less than or equal to 0°C was observed for 29 days in Skardu, followed by 21 days in Quetta valley and 15 days in Gilgit. Number of stress days with maximum temperature greater or equal to 30°C or 40°C and R.H. less than or equal to 30% was nil in all agricultural plains of the country .

Agricultural soils showed mostly normal to cooler trend in most agricultural areas of the country. In all the four representative stations i.e. Rawalpindi, Faisalabad Tandojam and Quetta divisions soil temperature remained mostly normal to below normal both at root zone and deep layers. However the drop in soil temperature is more at shallow layers than intermediate and deep layers.

From the general analysis of soil behavior in this month, it is concluded that crop growth and development are free from moisture stress due to satisfactory rains in most of the agricultural plains during the month, which is an indicator of normal yield of Rabi crops.

### TEMPERATURE REGIME DURING FEBRUARY, 2012

STATION	TEMPERATURE (°C)					NUMBER OF STRESS DAYS WITH		
	DAILY	MAXIMUM		MINIMUM		MINIMUM TEMP ≤ 0°C	MAX. TEMP ≥ 35°C & R.H. ≤ 30 %	MAX. TEMP ≥ 40°C & R.H. ≤ 30 %
	MEAN	MEAN	HIGHEST	MEAN	LOWEST			
PESHAWAR	13.4 (12.9)	17.8 (19.5)	26.0 (30.0)	4.6 (6.3)	0.6 (-2.0)	0	0	0
D.I. KHAN	14.6 (14.7)	20.7 (22.1)	28.5 (33.0)	5.6 (7.3)	1.0 (-2.0)	0	0	0
KAMRA	11.7 ---	12.4 ---	24.5 ---	2.7 ---	-1.5 ---	0	0	0
RAWALPINDI	12.4 (12.1)	18.0 (19.1)	25.0 (30.0)	4.5 (5.1)	1.0 (-2.0)	0	0	0
JHELUM	14.6 (14.7)	21.0 (21.6)	28.0 (34.0)	5.9 (7.7)	0.6 (0.0)	0	0	0
SARGODHA	15.4 (14.6)	21.2 (22.4)	27.5 (32.3)	6.0 (6.8)	1.5 (-3.0)	0	0	0
LAHORE	16.1 (15.4)	20.5 (22.0)	26.3 (33.0)	8.3 (8.9)	4.5 (-1.0)	0	0	0
FAISALABAD	15.5 (14.5)	21.0 (21.9)	26.5 (34.0)	5.6 (7.1)	0.2 (-2.0)	0	0	0
MULTAN	16.0 (15.4)	22.0 (23.2)	28.2 (33.0)	6.2 (7.6)	1.2 (-2.0)	0	0	0
KHAN PUR	16.0 (15.9)	23.2 (24.4)	30.5 (34.0)	5.6 (7.3)	0.0 (-2.8)	0	0	0
QUETTA	6.1 (6.0)	9.1 (12.9)	19.0 (27.0)	-3.2 (-0.9)	-9.0 (-16.7)	21	0	0
ROHRI	18.6 (18.1)	23.6 (25.3)	31.5 (38.0)	9.4 (10.9)	3.0 (-1.0)	0	0	0
TANDOJAM	19.5 (20.9)	25.4 (28.1)	32.5 (39.0)	7.7 (13.6)	-2.0 (2.0)	0	0	0
GILGIT	6.7 (6.1)	12.2 (12.0)	16.5 (20.7)	0.5 (0.2)	-2.5 (-8.9)	15	0	0
SKARDU	1.4 (0.4)	5.9 (5.5)	9.6 (14.6)	-3.7 (-4.7)	-7.5 (-19.0)	29	0	0

### SOIL TEMPERATURE (°C)

STATION	TIME (PST)	DEPTHS (CM)					
		5	10	20	30	50	100
RAWALPINDI	8 AM	9.6 (8.3)	10.3 (9.2)	11.3 (11.0)	12.0 (12.1)	12.6 (12.8)	13.7 (14.3)
	2 PM	15.0 (16.7)	13.3 (14.2)	11.9 (12.0)	12.1 (12.1)	12.6 (12.8)	13.7 (14.4)
	5 PM	15.0 (15.1)	13.6 (14.6)	12.2 (12.9)	12.4 (12.5)	12.6 (12.7)	13.7 (14.3)
FAISALABAD	8 AM	11.9 (10.4)	12.7 (11.1)	14.7 (13.7)	15.9 (15.3)	16.7 (16.5)	17.8 (17.6)
	2 PM	19.1 (23.4)	17.4 (20.2)	15.7 (16.0)	15.8 (15.4)	16.6 (16.2)	17.8 (17.7)
	5 PM	18.4 (20.7)	17.9 (20.1)	16.5 (17.4)	16.0 (16.1)	16.6 (16.2)	17.8 (17.6)
TANDOJAM	8 AM	18.2 (17.3)	18.1 (19.8)	19.7 (19.9)	21.0 (22.3)	21.5 (22.4)	21.3 (22.9)
	2 PM	22.9 (26.4)	22.0 (23.0)	20.0 (20.7)	20.7 (22.0)	21.3 (22.3)	21.5 (23.1)
	5 PM	24.2 (25.9)	23.4 (25.0)	21.0 (22.2)	21.1 (22.3)	21.4 (22.2)	21.5 (23.0)
QUETTA	8 AM	3.7 (3.0)	4.5 (3.7)	6.8 (5.5)	3.6 (6.7)	7.9 (7.0)	9.7 (9.3)
	2 PM	11.1 (12.9)	9.6 (9.7)	7.0 (6.2)	3.5 (6.5)	7.8 (7.1)	9.7 (9.3)
	5 PM	11.3 (11.6)	10.5 (10.6)	8.0 (7.5)	4.0 (6.8)	7.8 (7.1)	9.7 (9.3)