## **MOISTURE REGIME DURING AUGUST, 2012**

August remains generally hot and wet in Pakistan. Summer monsoon rains normally start in the first week of July and continue till the mid of September. Rainfall during this August showed mixed trend in the country. Monsoon rains were observed below normal in most parts of the country up to  $2^{nd}$  decade of August. But due to significant low pressure systems that entered in the country during last decade of August, satisfactory rains received up to the end of August. However due to persistent dry weather/ less rains Kharif crops suffered in both rainfed and irrigated areas of the country.

Flash flooding was also observed due to isolated heavy spells in parts of southern Punjab and KP. Whereas mostly dry weather/meager rain was reported in agricultural plains of Sindh.

Highest amount of rainfall was reported 482mm at Muzaffarabad, followed by 469mm at Muree, 410mm at Islamabad (A/P), 404mm at Mandibahudin, 332mm at Balakot and 315mm at Kotli. Maximum number of rainy days was reported 16 at Jhelum, followed by 15 days at Lahore and 13 days at Gilgit.

The evaporative demand of the atmosphere represented by reference crop evapotranspiration (ETo) remained normal to above normal in most of the agricultural plains of the country except Quetta valley whereas it remained below normal at Quetta valley, Tandojam in lower Sindh and Gilgit GB region due to dry weather for most of the days in the area. The highest value of ETo was estimated in Tandojam in lower Sindh.

The mean daily Relative Humidity (R.H) remained normal to below normal in most of the agricultural plains of the country including agricultural plains of Khyber Pakhtoonkhawa, Gilgit Baltistan region, agricultural plains of Punjab and Sindh. Whereas it remained above normal in Faisalabad in central Punjab and Multan in southern Punjab.

From overall analysis of the whole monsoon season of this year it is evident that mostly dry weather/clear skies were reported for most of the days from July to mid of August. Due to which crops suffered in most parts. However satisfactory rains in the last decade of August has improved soil moisture status in most of the agricultural plains of the country and expected rains in September may improve moisture content of the soil and atmosphere in the remaining period of Kharif season.

	PRECIPITATION (MM)			REFERENCE CROP	<b>RELATIVE HUMIDITY</b>	
STATION				EVAPOTRANSPIR-	RELATIVE HOMIDITT	
	TOTAL No. OF OF > 5 MM/DAY		ATION (ETo) (MM/DAY)	MEAN		
	IUIAL	No. OF DAYS	OF≥5 MM/DAY		MEAN	No. OF DAYS WITH MEAN
						$R.H \ge 80\%$
PESHAWAR	92.0	09	92.0	4.1	64	01
	(67.7)			(5.2)	(65)	
D.I. KHAN	133.7	08	133.7	5.1	65	01
	(57.5)			(5.3)	(65)	
KAMRA	73.0	08	50		57	00
		10	222.0			0.4
RAWALPINDI	247.9	12	233.0	4.9	68	04
	(309.9)	16	254.6	(4.9)	(70)	07
JHELUM	265.7	16	254.6	4.2	75	07
	(221.2)	04	16.0	(4.3)	(71) 65	01
SARGODHA	16.0 (129.1)	04	16.0	4.7	65 (67)	01
LAHORE	(129.1)	15	191.2	4.0	(87)	05
	(163.9)	15	171.2	(4.4)	(69)	05
FAISALABAD	24.0	06	15.0	5.2	61	00
	(89.9)	00	15.0	(5.3)	(66)	00
MULTAN	9.8	06	8.4	5.4	63	01
	(32.6)			(6.8)	(59)	
KHAN PUR	42.7	02	40.0	5.1	64	01
	(23.0)			(6.7)	(57)	
QUETTA	23.7	03	22.5	5.9	33	00
	(12.1)			(5.7)	(40)	
ROHRI	TR	01	0.0	5.9	52	00
	(19.8)			(6.7)	(59)	
TANDOJAM	TR	04	0.0	6.2	65	00
	(60.8)			(4.3)	(65)	
GILGIT	11.8	13	0.0	4.9	47	00
	(15.5)	15	0.0	(4.4)	(47)	
SKARDU	5.1	09	0.0	4.0	40	00
	(10.5)		0.0	(4.4)	(39)	

## MOISTURE REGIME DURING AUGUST, 2012