

FORTNIGHTLY DROUGHT WATCH BULLETIN

(1-15 November, 2020)

1. Weather Summary for the 1st fortnight of November 2020

During the first fortnight of November 2020, Rain bearing systems produced light to moderate rainfall at isolated places in the country. Spatial distribution is shown in Figure No.1. The chief amounts of rainfall recorded across Pakistan during the period 1-15 November, 2020 are shown in Table-1 below;

Table:1					
Sr. No.	Station	Rainfall (mm)	Sr. No.	Station	Rainfall (mm)
1	DIR	108	6	LOWER DIR	68
2	MALAMJABBA	87	7	MALAM JABBA	65.3
3	UPPER DIR	83.2	8	SAIDU SHARIF	63
4	KALAM	72	9	CHITRAL	58.5
5	BUNER	71.4	10	BESHAM	57.3

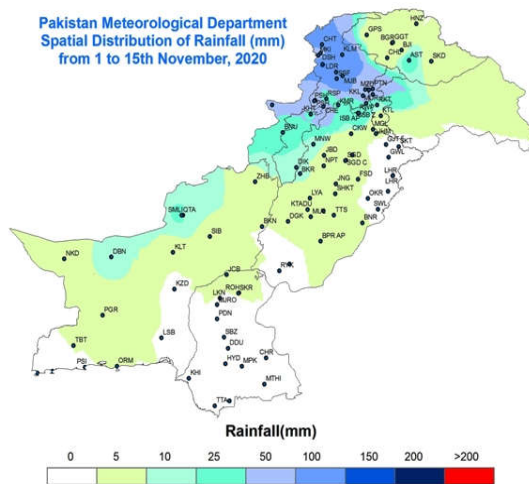


Figure 1: Rainfall distribution of Pakistan during 1st fortnight of November-2020

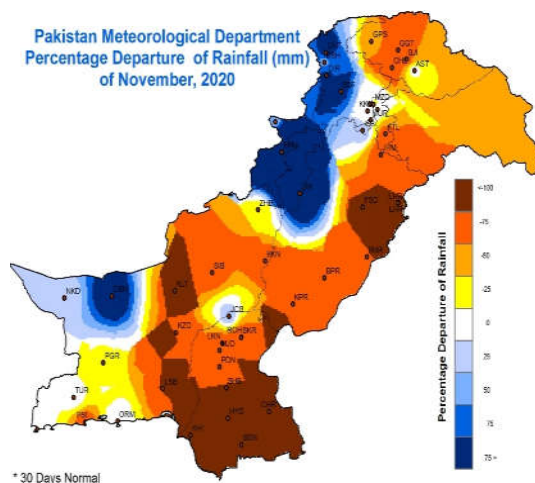


Figure 2: Rainfall Departure from Normal during 1st fortnight of November -2020

Figure 1 shows Spatial distribution of recorded rainfall during the period. The Figure 2 depicts the Percentage Departure of Rainfall from the normal. Generally, below normal rainfall was received across whole of Pakistan except few places in khyber Paktunkhawa and Blochistan. Farmers are advised to keep themselves abreast of weather updates and plan field activities accordingly to minimize weather induced losses to matured/cultivated crops.

2. Drought Situation Analysis

Drought analysis results using different indices are represented in Fig.3. Wet conditions prevailed over most places in the northern parts of the country. During the first fortnight of November 2020, few good rain was reported in the agricultural plains of Khyber Pakhtunkhawa.

DROUGHT OUTLOOK OF PAKISTAN

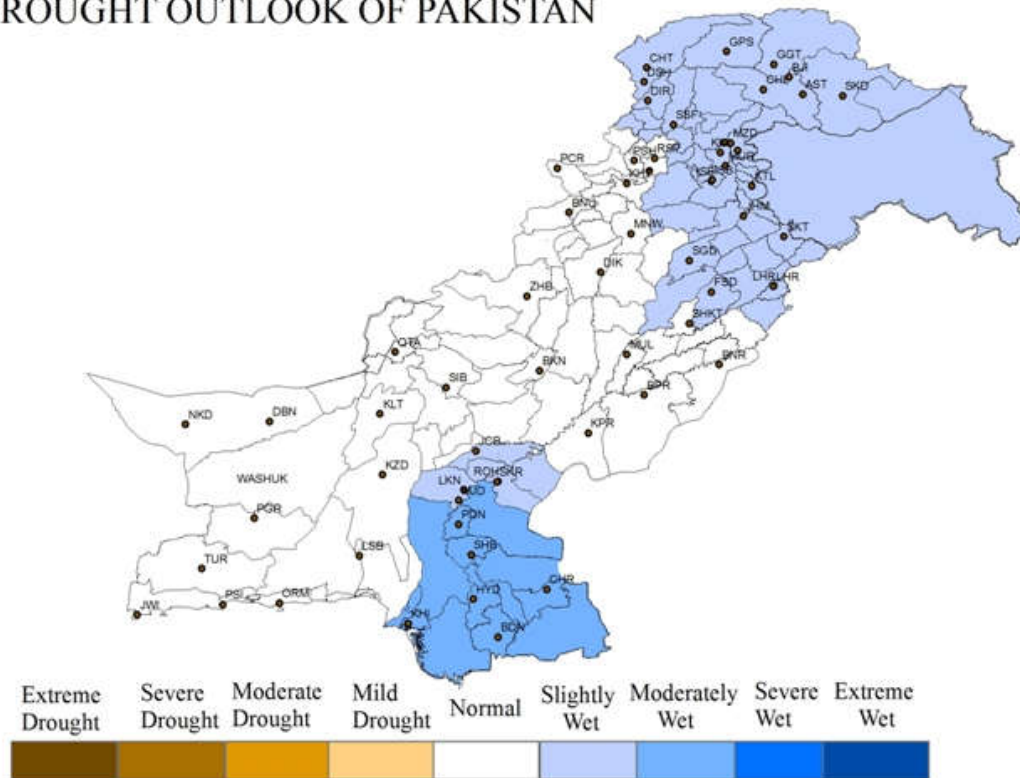


Figure 3: Drought Outlook during 1st fortnight of November 2020

3. Normalized Difference Vegetation Index (NDVI)

Normalized Difference Vegetation Index values for the period 24 Oct to 05 November, 2020 are shown in Fig.4. NDVI values are good, depicting the impacts of wet conditions over the areas of upper KP, Punjab and along the Indus belt, whereas low NDVI values are observed in the southern parts.

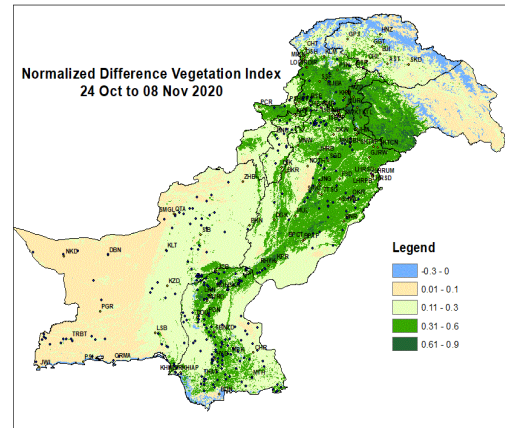


Figure.4: NDVI 24 Oct to 05 Nov, 2020

4. Land Surface Temperature (LST)

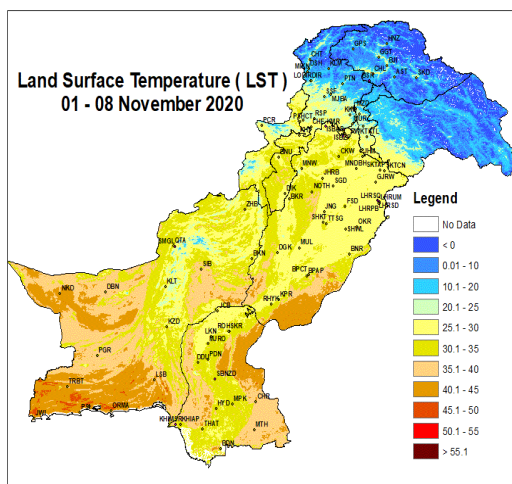


Figure5: LST 01 – 08 November, 2020

Land surface Temperatures (LST) for the period 01 – 08 November, 2020 are represented in Fig. 5. In northern and central parts of the country, temperatures are low as compared with southern parts which are showing higher values. Most of the central areas are observing temperatures between 20°C to 25°C, while some areas in western Balochistan experienced temperatures around below 20°C.

5. Temperature Vegetation Dryness Index (TVDI)

Temperature Vegetation Dryness Index (TVDI) derived from MODIS product MOD13A2 (NDVI) and MOD11A2 (LST) is shown in Fig. 6, which indicates that mild, dry conditions prevail across southwestern Balochistan. Areas around Nokkundi, Pasni and Ormara are under moisture stress conditions, few areas in sindh are also under water stress conditions.

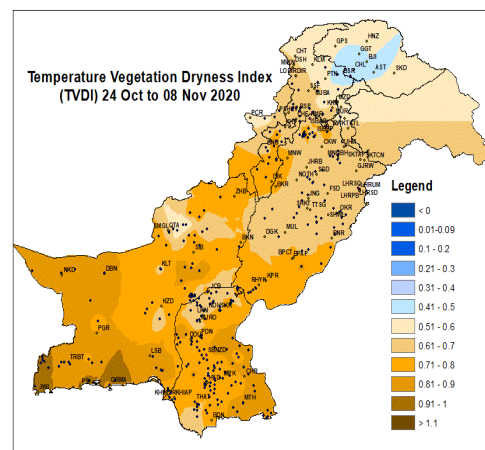


Figure 6: TVDI 24 Oct to 08 Nov, 2020