



Government of Pakistan
Ministry of Aviation
Pakistan Meteorological Department
National Drought Monitoring & Early Warning Centre (NDMC)
Meteorological Headquarters
Islamabad, Pakistan

DR-5/DRT/ADV/ALERT/2021-22

Islamabad, 7th September, 2023

SUBJECT: DROUGHT WATCH (2023)

As predicted by the Pakistan Meteorological Department (PMD), the country overall received normal rainfall up till now. August 2023 was the 2nd driest month in Pakistan in the last 63 years as -65.9% below normal rainfall was recorded in the country. The highest deficit in rainfall was experienced in Sindh and Balochistan during the month. The rainfall departure (%) detail is as under:


Table-1 Area weighted rainfall departure (%) from June till 7th September 2023

	June	July	August	(1-7) September	July to 7 th September	June to 7 th September
Sindh	385.1	142.6	-98.3	-99.6	20.4	48.6
Balochistan	199.1	111.4	-89.4	-70.7	19.7	45.0
Punjab	172.3	47.0	-58.0	-91.2	-8.6	13.5
Khyber-PK	88.3	19.2	-51.3	-71.3	-19.1	-4.2
Gilgit-B	8.9	233.4	28.2	75.9	116.1	89.2
Azad J&K	48.4	30.9	-54.9	-58.7	-11.8	-2.5
Pakistan	160.3	69.7	-65.9	-80.2	0.5	20.8
<i>*Normal period (1961-2010)</i>						

- Sindh province highly depends upon monsoon season (July-September) which contributes almost 80% of the annual rainfall. August is known to be the 2nd wettest monsoon month in the country. Due to the below-normal rainfall (August 2023), **abnormally dry conditions (mild drought)** are prevailing in the districts of Sindh (**Umerkot, Tharparkar and Sanghar, Dadu, Jamshoro, Khairpur, Shahdad Kot and Shaheed Benazirabad**), central and southern districts of Balochistan (**Chagi, Gawadar, Harnai, Kech, Kharan, Mastung Nushki, Pishin, Panjgur, Qila Abdullah, Quetta and Washuk**) and the Cholistan region (**Bahawalpur, Bhawalnagar and Rahim Yar Khan**) in Punjab. Low rainfall and high temperature emerged the water stress conditions which have started to impact the vegetation over these areas (Figure-2).
- According to the climatological normal (1981-2010), Sindh, Balochistan and Cholistan remain dry from October to December. Keeping in view the climatology and current seasonal forecast of PMD

for these areas, drought conditions may intensify and affect agriculture and livestock. Dry conditions will also cause water stress for the sowing of Rabi crops.

4. It is advised to all stakeholders to judicious use of water and takes pre-emptive measures for disaster-prone districts. Farmers/agriculturists are advised to keep themselves updated from the PMD website <http://www.pmd.gov.pk>.
5. NDMC is continuously monitoring the drought situation over the country and keeping the stakeholders and general public updated by issuing drought information on a weekly, fortnightly and monthly basis.


(DR SHAHZADA ADNAN)
 Deputy Director
 For Director General, PMD

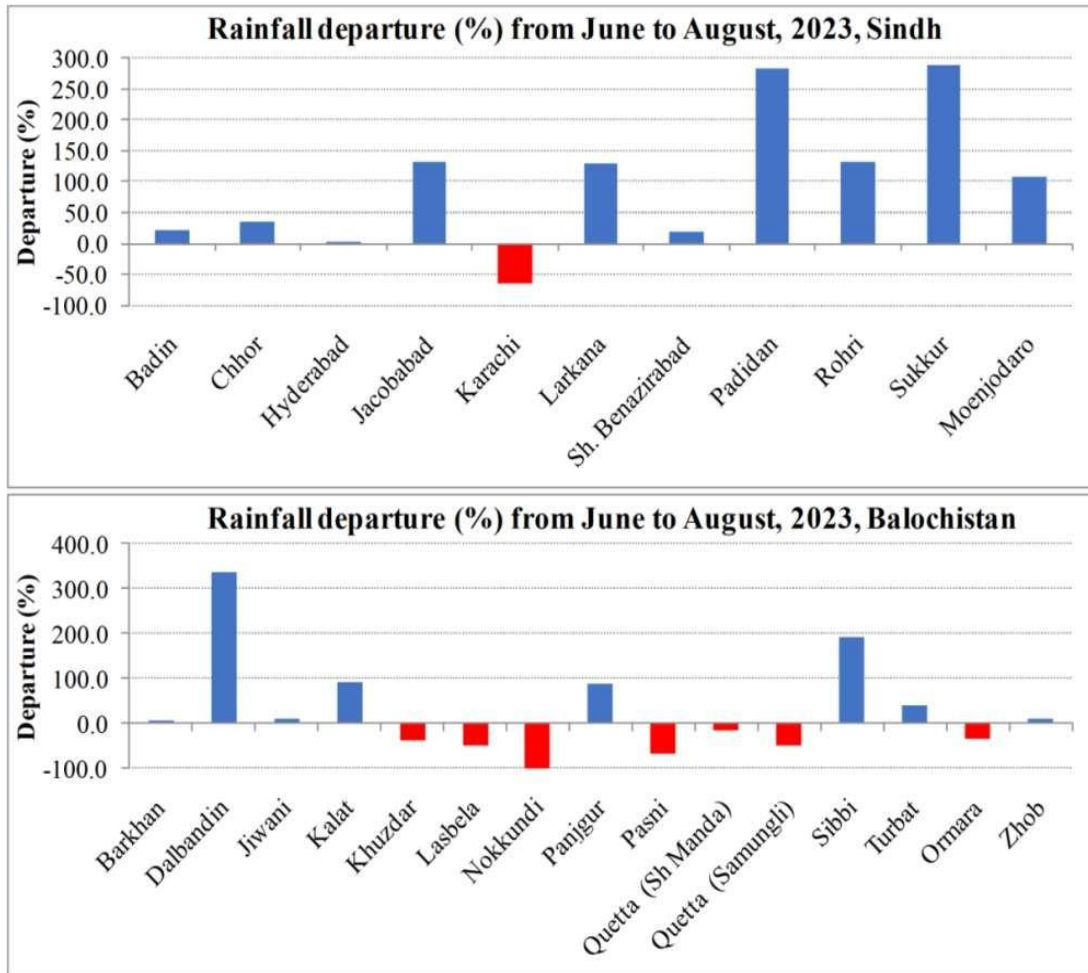


Figure 1 Rainfall departure (%) from June till 7th September 2023 in Sindh and Balochistan

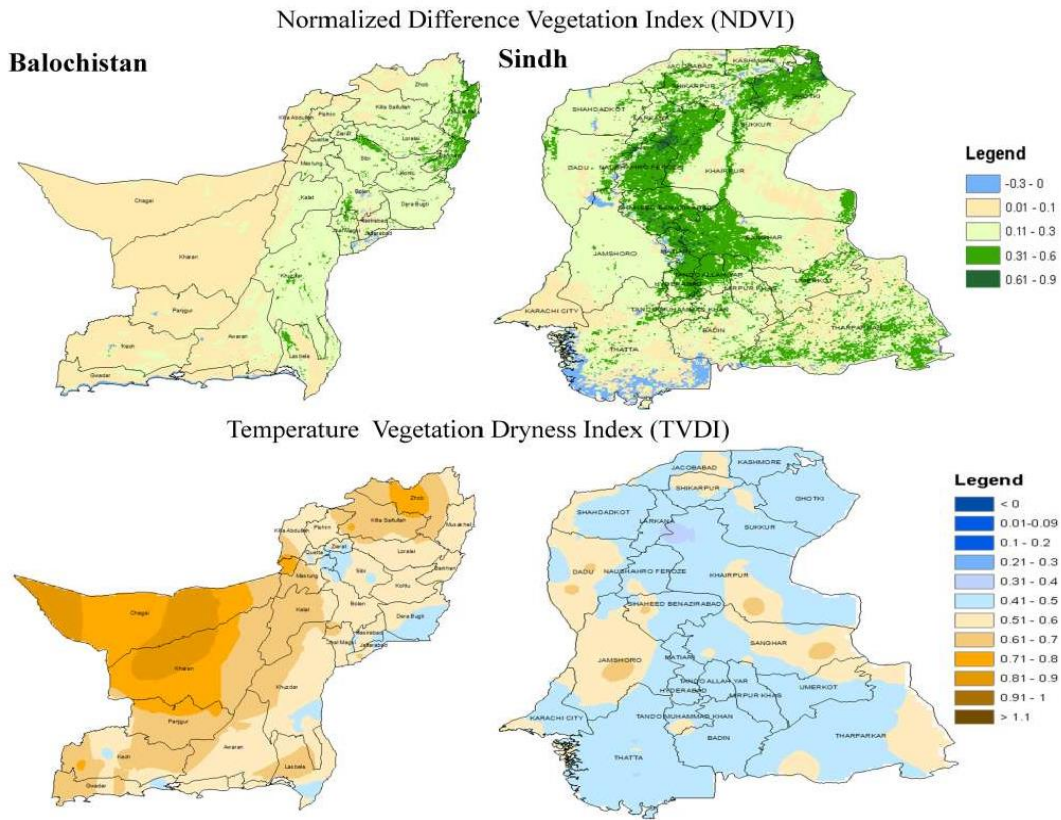


Figure 2 Satellite based vegetation conditions (NDVI, TVDI) of August 2023 in Sindh and Balochistan

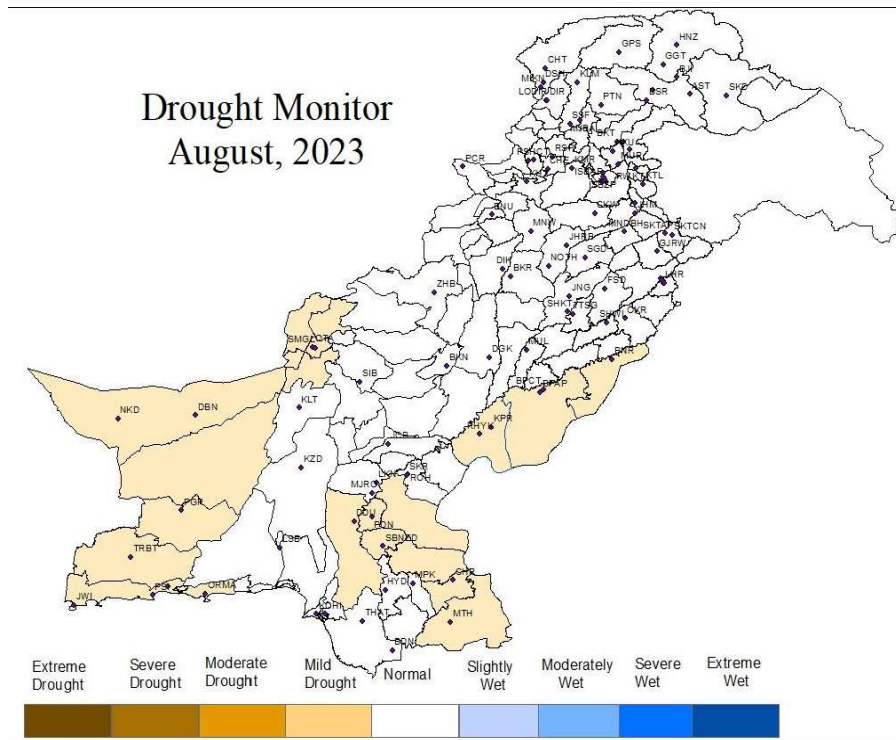


Figure 3 Drought condition of Pakistan August 2023