

This report identifies the current trends, events, and short-term forecast associated with the 2013 monsoon season.

OVERVIEW

- Weather forecasts indicate a countrywide monsoon spell over the next week with potential heavy impacts between 1 and 4 August. There is a need to monitor the flood impact situation in regions traditionally prone to flash and riverine floods.
- The Pakistan Metrological Department has issued flash flood warnings for rain affected areas of Balochistan and Dera Ghazi Khan Division in Punjab. Water channels in the catchments of rivers Chenab and Ravi in Punjab and Kabul in Khyber Pakhtunkhwa (KP) may attain medium to high flood levels.
- The Space and Upper Atmosphere Research Commission (SUPARCO) indicates the snow cover in 2013 is higher compared with 2008 to 2012, with a corresponding impact on snowmelt. Higher temperatures could cause a rise in river flows.
- Water reservoirs continue to fill up comparatively earlier than in previous years, thereby limiting flood impact mitigation options.
- Rivers Indus, Chenab, Kabul and Swat are flowing at higher than normal flood levels.

MONSOON EVENTS AND IMPACT

Rainfall: Last week was characterized by hot and humid conditions with scattered rains. The Pakistan Meteorological Department (PMD) issued a flash warning for north-eastern Punjab along rivers Chenab and Ravi catchments.

Media reports indicate the occurrence of flash floods in Chitral district in KP, resulting in crop losses and damages to houses, shops and roads.

Snow and ice melt impact: Studies indicate snow and ice melt supplies 85 per cent of water to the Indus River at Tarbela reservoir, 75 per cent of water to Kabul River at Warsak reservoir in KP, 80 per cent of Swat River water and 65 per cent of Jhelum River water.

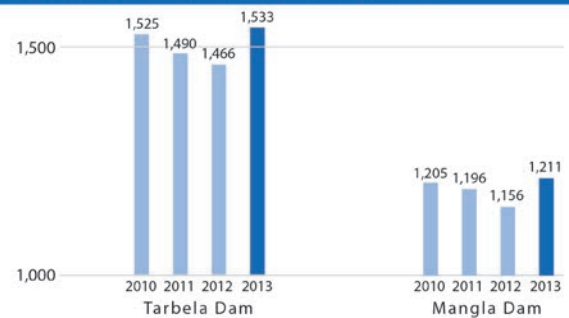
Nearly 50 per cent of the runoff water along the Indus River comes from snowmelt. Therefore, the monsoon impact during

summer months should be seen in the wider context of snowmelt and precipitation. Experts estimate 10 per cent of the average runoff is caused by rainfall along the Indus plains.

River floods: Rivers Indus, Chenab, Kabul and Swat are in low flood.

Water reservoir levels: As of 2 August, Tarbela and Mangla Dams are at elevations of 1533 feet and 1210.65 feet respectively, which are 17 feet and 31.35 feet below their maximum conservation levels of 1550 feet and 1242 feet respectively. The combined live storage position of Tarbela, Chashma and Mangla reservoirs is 10.735 million acre-feet (MAF), compared with last year's 4.712 MAF.

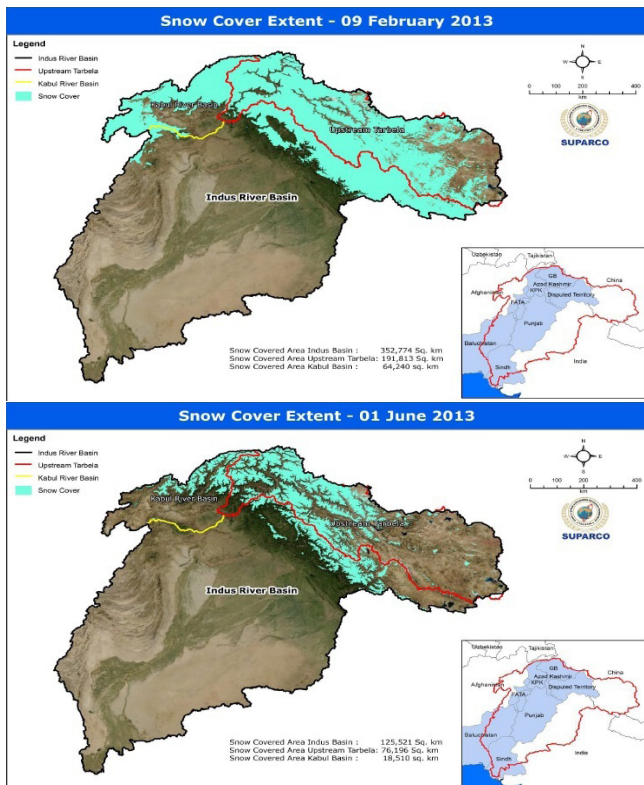
Water Reservoirs Elevation (2 August 2013)



FORECAST

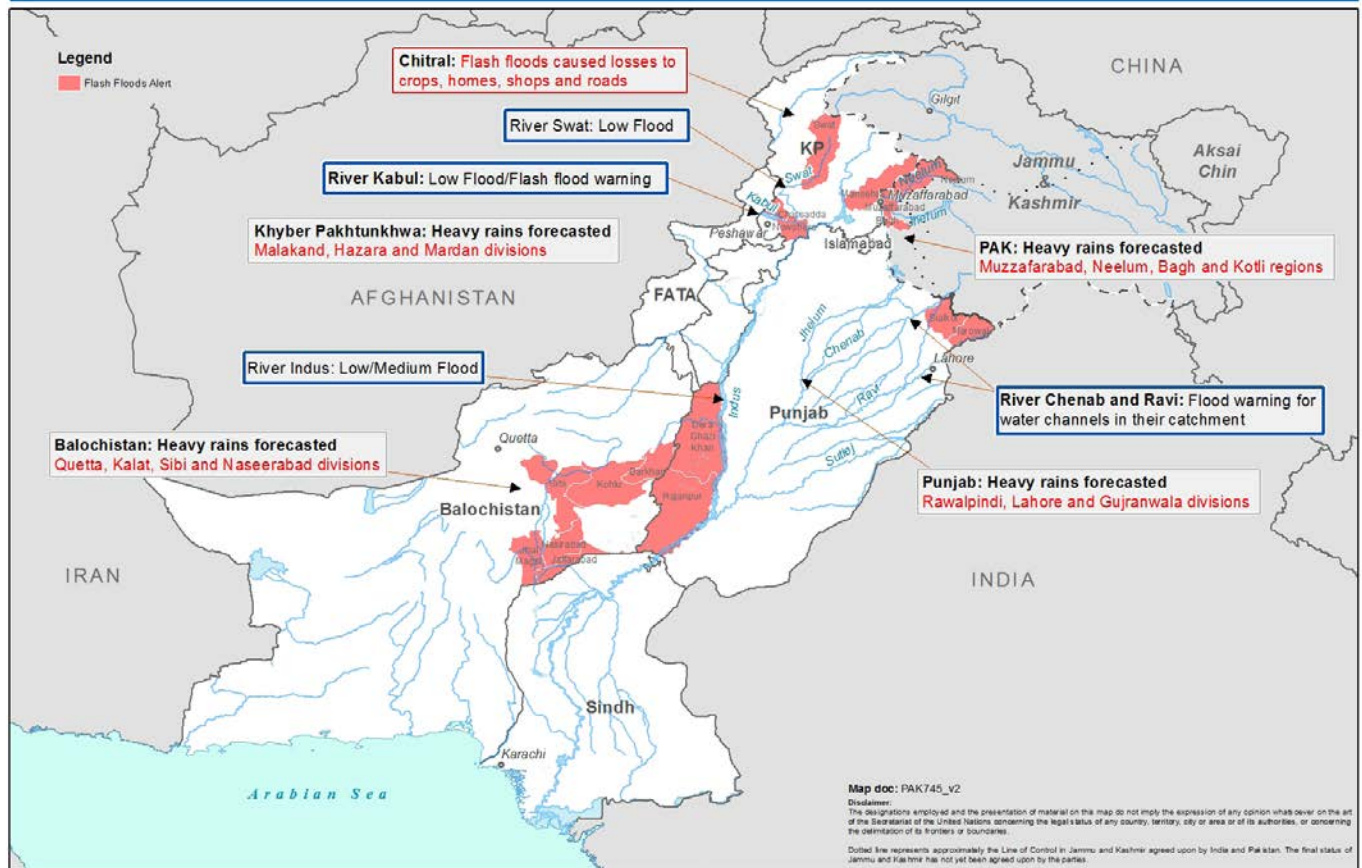
Countrywide monsoon rains are anticipated from 1 to 4th August. Forecasts indicate a potentially heavier impact in Rawalpindi, Lahore and Gujranwala divisions in Punjab; in Malakand, Hazara and Mardan divisions of KP; Quetta, Kalat, Sibi and Nasirabad divisions of Balochistan; and Muzaffarabad, Neelum, Bagh and Kotli regions of Pakistan-Administered Kashmir (PAK). Rains are also expected across northern Sindh and in Gilgit-Baltistan.

There is a need to monitor the impact of the rains in the traditionally flash flood-prone areas of Mardan, Malakand and Hazara divisions in KP; across northern PAK; north-eastern Punjab and in the Dera Ghazi Khan division; and in Kalat, Sibi and Nasirabad divisions of Balochistan.

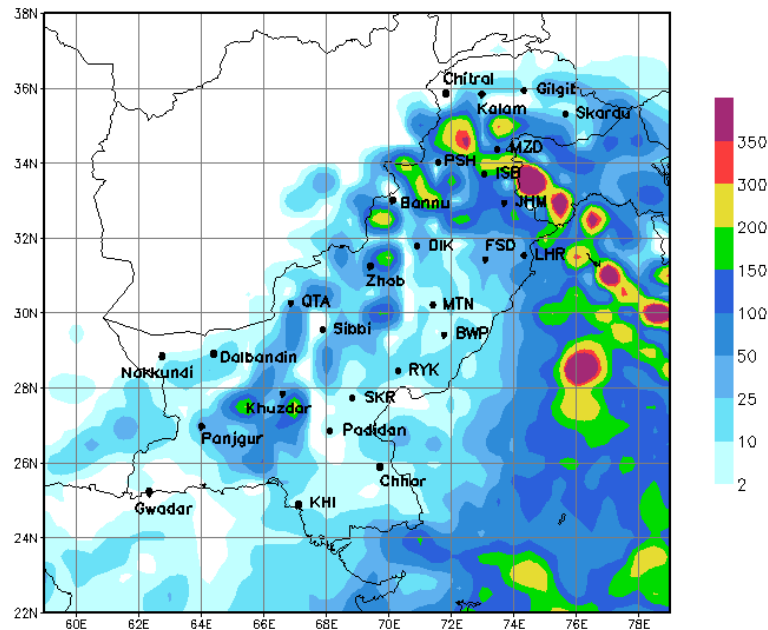


MONSOON EVENTS & IMPACT

PAKISTAN: Monsoon Situation Update (28 July - 2 August 2013)



Precipitation Outlook for 12Z 29-JUL-2013 to 12Z 06-AUG-2013



For further information, please contact:

Kamran Shariff
Humanitarian Affairs Officer, Civil-Military Coordination and Preparedness
OCHA Pakistan
shariffk@un.org, +92 346 856 36 40
For more information, please visit: <http://www.pakresponse.info>

References:

Pakistan Metreological Department: <http://www.pmd.gov.pk>
Federal Flood Commission: <http://www.ffc.gov.pk>
Space and Upper Atmosphere Research Commission: www.suparco.gov.pk
Media reports