

Monitoring meteorological drought and wet pattern at Naula station of upper Ramganga river basin in the Himalayan region

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ABSTRACT : Assessment and monitoring of meteorological drought and wet conditions are very important in dealing with agricultural production and water resources management under the influence of changing climate in the Himalayan region. This study was conducted to investigate the drought and wet pattern at Naula station of upper Ramganga River basin in the Himalayan region. Standardized Precipitation Index (SPI) at 1-, 3-, 6-, 9-, 12- and 24- month time scales was used to assess meteorological drought and wet pattern at Naula station. Results indicated that there are more chances of occurrences of mild drought and wet conditions followed by meager chances of moderate drought and wet conditions during monsoon season. The chances of severe and extreme drought and wet conditions are almost negligible (4-6%). Therefore, efforts must be made to harvest the excess water during the wet periods and utilize the same during the drought periods for drinking purpose, household activities and irrigation.

Key Words: Meteorological drought, SPI, trend analysis, wet spell.