Mar 02, 2020, Hindustan Times, Delhi, Page 8
AVE: INR 1,681,650, Circulation: 809,871

Studies point to water crisis in Himalayan region by 2050

Jayashree Nandi
letters@hindustantimes.com

NEW DELHI: A new compilation of studies on water availability in eight towns in the Hindu-Kush Himalayan (HKH) region — also known as the water towers of Asia — has set off alarm bells on the demand-supply gap, which could aggravate further due to global climate change leading to an acute crisis by 2050.

The studies show that the demand–supply gap in eight of the surveyed towns in the HKH region is between 20% and 70%. The eight towns are Havelian and Murree in Pakistan; Mussoorie, Devprayag, Singtam and Kalimpong in India, Damauli and Tansen in Nepal.

In line with current trends, the demand–supply gap may double by 2050, said the studies published in Water Policy journal. They highlight the water supply in Mussourie is 9.1 million litres per day (MLD), but in most years the demand goes up to 14.4 MLD, especially during peak tourist season. However, the total local demand in Mussourie is 6.9 MLD.

All households in both Mussoorie and Devprayag depend largely on municipal water supply for various domestic chores such as drinking, cooking, washing and bathing. In Devprayag, 44% of the households collect water from Ganga for their daily needs when water from its civic body is not available. This usually happens during the monsoons, when the supply line gets cut off due to landslides or the destabilisation of slopes.

STUDIES SHOW THAT DEMAND-SUPPLY GAP IN EIGHT OF THE SURVEYED TOWNS IN THE HKH REGION IS BETWEEN 20% AND 70%

In these two hill towns in Uttarakhand, springs are the main source of piped water supply system. In Mussoorie, the municipality taps 20 spring sources to generate 9 MLD transported by gravity and pumping systems. Devprayag has only two spring-fed streams. Most households in these towns depend on public standposts and water tankers as water shortages are most acute between May and July due to peak tourist season coupled with lean discharge period.

There is a high dependence on springs — ranging between 50% and 100% — for water supply in three-fourths of the urban areas in the HKH region.

For instance, in east Sikkim's Singtam, 82.9% of households' municipal supply do not get any water in their taps during the dry season (between January and May). Consequently, around 70% of these households have to depend on water supplied through poly-pipes from different spring sources. Survey respondents in Singtam said lack of conservation, resulting in degradation due to development pressure, land use change in spring catchments, decreased rainfall and increased number of dry months are leading to water depletion at an alarming rate.

"Of the four Himalayan towns we studied in India, we chose a combination of tourist towns as well as small towns, which have the potential to become major urban centres in the near future. We found that except in Devprayag, where a recent intervention was done to overhaul the water supply systems, the rest is facing severe water scarcity especially during dry seasons. Springs are drying up rapidly and water availability in some of the springs have also gone down drastically. We found both climatic and non-climatic factors affecting water supply in these towns," said Anjal Prakash, co-author of the studies and Research Director, Bharti Institute of Public Policy, Indian School of Business, Hyderabad.

"The condition is so severe in Mussoorie that people are now considering sourcing water from Yamuna. In the context of water, every place has a carrying capacity. We cannot increase the number of springs so we need to plan. The population in Mussoorie goes up exponentially during summer due to tourists' influx. Devprayag is a key site in the char dham yatra because of the confluence of Alaknanda and Bhagirathi. And now the government is building an all-weather road for char dham. Is it sustainable? We are going to see day zero [when most of a town's taps will be switched off] in many hill towns soon," said Manoj Mishra, convener of Yamuna Jiye Abhiyan, a peoples' movement to revive the river that was launched in February, 2007.