**Shrinking aquifer**

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 Nearly, 70 percent of Earth is covered in water, but just 2.5 percent of that is freshwater, and another 30 percent is glacial; mak­ing groundwater a criti­cal resource for human survival. Groundwa­ter is one of the many natural resources that face the risk of deple­tion despite being easily accessible. The water in riv­ers is a good example of where groundwater can be found. The area surrounding the subconti­nent (present-day Pakistan and India) is rich in both natural re­sources and groundwater.

Speaking of Pakistan, the country is rich in water bod­ies, most of which can be found in the country’s most populous province of Punjab. That be­ing said, Pakistan is one of the top ten countries most vulnera­ble to the devastating effects of climate change, which include extreme weather conditions like floods, droughts, cyclones, heavy rains, heat waves, and ex­tremely high temperatures. Add water pollution to the mix and you have a country that is on the brink of all-out chaos.

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In Lahore, the Ravi Riv­er serves as the primary wa­ter supply. However, it remains dry for most of the year. Many people in Lahore are worried that the city may soon face wa­ter scarcity that could threat­en the lives of its residents be­cause of this problem. The Ravi River is a significant tributary of the Indus River. It crosses the border between India and Pak­istan on its way to the sea. Out of Punjab’s five major rivers, Ravi is the smallest. Several In­dian states, including Himachal Pradesh, Punjab, and Jammu & Kashmir, lay in the river’s path as it makes its way through the country. Bara Banagal, in Hi­machal Pradesh’s Kangra dis­trict, is where the Ravi River be­gins its journey downstream. The length of the Ravi River is 725 kilometres. The river has a drainage basin that is 14442 square kilometres in size. Most of the Ravi River’s water comes from rain and snowmelt.

Among Lahore’s many grow­ing problems, groundwater de­pletion needs to be addressed on an urgent basis. The use of Ravi surface water as a cost-effective alternative is a realistic possibil­ity in the not-too-distant future. Therefore, it is crucial to limit the growth of pollution to pre­serve this ancient aquatic water body, which is also a reserve for Lahore’s citizens. The problems plaguing River Ravi are shared by many of Pakistan’s other riv­ers and sweetwater lakes. The historic sewerage and sanita­tion system has drastically de­teriorated because of the enor­mous population growth over the last three decades. There­fore, practically all major cit­ies and even some smaller ones dump their trash into the wa­terways that cut through them, as this is the most practical and least subject to oversight. The historic sewerage and sanita­tion system has drastically de­teriorated because of the enor­mous population growth over the last three decades. There­fore, practically all major cit­ies and even some smaller ones dump their trash into the wa­terways that cut through them, as this is the most practical and least subject to oversight.

[Cold, dry weather expected in most parts of country: PMD](https://www.nation.com.pk/16-Nov-2022/cold-dry-weather-expected-in-most-parts-of-country-pmd)

As Lahore’s population and economy grow, so does the pres­sure on the city’s aquifer, which is causing the groundwater res­ervoir to quickly deplete, creat­ing a sinkhole. Though flooding is coming during the monsoon season, the largest recharge riv­er, the Ravi River, is mostly dry for the rest of the year. Concerns have been raised that Lahore, Pakistan, could have a water cri­sis soon. In low-flow seasons, the river acts nearly as a “sullage carrier,” as millions of tonnes of effluents are thrown into it from a variety of drains. According to research conducted at the Uni­versity of York and published in the Proceedings of the Nation­al Academy of Sciences of the United States, pharmaceutical particles such as paracetamol, nicotine, caffeine, epilepsy, and diabetic drugs were discovered in the river. Contaminated wa­ter is a key contributor to illness and one of the most dreaded problems in the provincial cap­ital next to smog.

[US targets production, transfer of Iranian drones to Russia in new sanctions](https://www.nation.com.pk/16-Nov-2022/us-targets-production-transfer-of-iranian-drones-to-russia-in-new-sanctions)

Pakistan’s water woes are al­ready being raised at the on­going Sharm el-Sheikh Climate Change Conference (COP 27). Aisha Khan, one of the coun­try’s leading climate activists, has urged member countries to recognise the critical situation at hand. “Mountain ecosystems are fragile. Degrading the moun­tain environment is imperilling our future and hastening our destruction. Mountains matter and we must protect and pre­serve mountain communities and ecological assets,” she said.

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