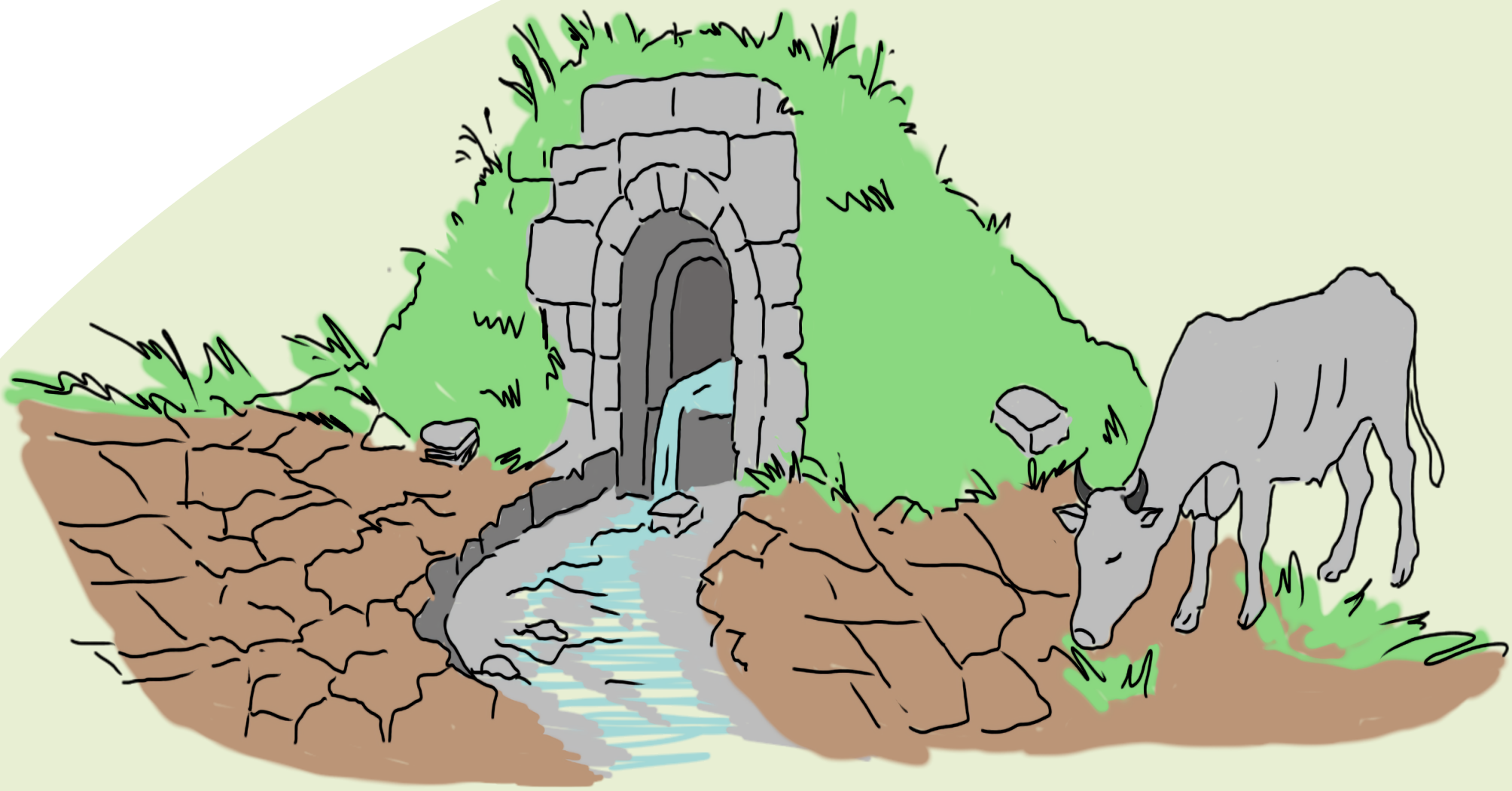


Drying Springs in Nepal: A Hidden Climate Crisis

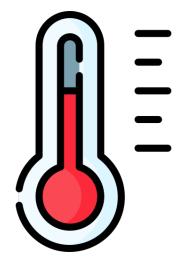


What are Springs?

Springs are natural outlets where groundwater emerges at the Earth's surface. They provide drinking water, irrigation, and domestic water for millions of people in Nepal's hills and mountain regions.

Why Are Springs Drying?

1. Climate Change



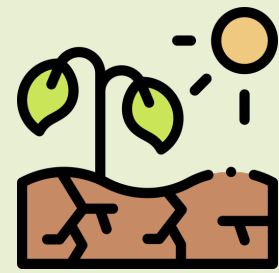
Rising temperatures



Irregular rainfall patterns



More intense rainfall



Longer dry spells

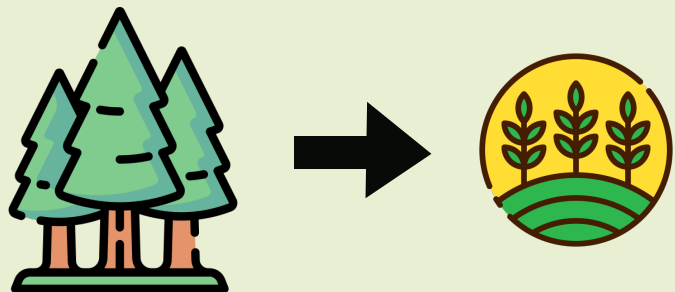
Climate change is altering Nepal's hydrological cycle. Rainfall is becoming more intense but less effective at replenishing groundwater because much of the water flows away as surface runoff (IPCC, 2022).

2. Human Activities

Human activities are accelerating spring depletion through:



Haphazard road construction



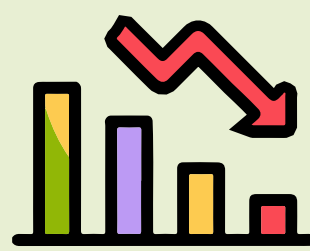
Land-use change



Catchment degradation



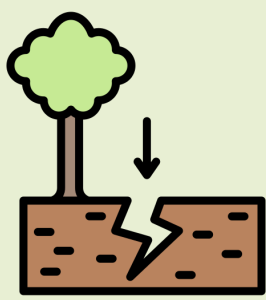
Deforestation



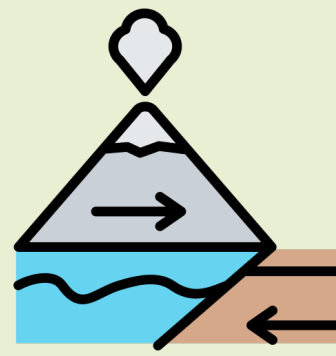
Poor watershed management

These activities disrupt hillslope hydrology and reduce groundwater recharge (ICIMOD, 2015).

3. Geological Factors



Nepal lies in a highly active seismic zone.



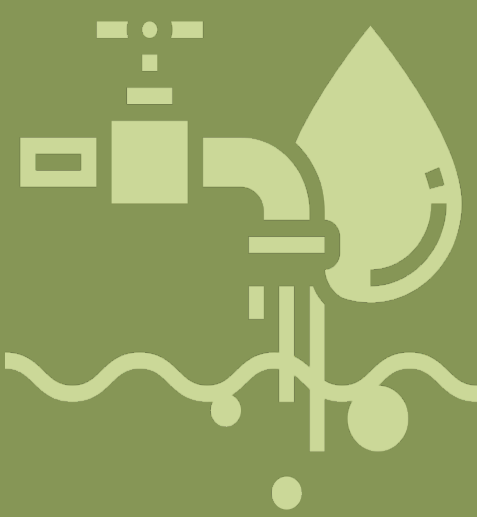
Earthquakes can disturb underground aquifers and alter groundwater flow paths.

Similarly, the Chure (Siwalik) Hills are geologically young and composed of loosely consolidated, easily eroded sediments, giving the region a low water-holding capacity and making it especially vulnerable to degradation and drying springs (Bhatta et al., 2026).

The Scale of Crisis

74%
of
300
municipalities

A nationwide study by the Nepal Water Conservation Foundation (NWCF) and International Centre for Integrated Mountain Development (ICIMOD) found that springs are drying up in 74% of the 300 municipalities and rural municipalities surveyed. In some places, the shortage of water has forced people to migrate from their birthplace (Dhakal et al., 2020).



Why Does This Matter?

Drying springs affect much more than water supply. They influence drinking water, agriculture, food security, public health, sanitation, rural livelihoods, and migration. As spring flow declines, communities face increasing pressure on their livelihoods and local economies (Poudel & Duex, 2017).

Sources

Dhakal, M., Bhattarai, C., Thapa, B., & Tiwari, S. (2020, December 10). Drying springs: A threat to human survival. *New Spotlight Magazine*, 14(9). <https://www.spotlightnepal.com/2020/12/10/drying-springs-threat-human-survival/>

Intergovernmental Panel on Climate Change. (2022). Cities, settlements and key infrastructure. In *Climate change 2022: Impacts, adaptation and vulnerability* (Chapter 6). Cambridge University Press. <https://www.ipcc.ch/report/ar6/wg2/chapter/chapter-6/>

International Centre for Integrated Mountain Development. (2015). [Report on spring hydrology in the Himalayan region]. ICIMOD.

Bhatta, B., Gautam, G., Puri, S., Patel, P., & Paudel, R. K. (2026, May 4). Overexploited for years, the chure hills are weakening, and water stress is rising across the Tarai. *The Kathmandu Post*. <https://kathmandupost.com/national/2026/05/04/overexploited-for-years-the-chure-hills-are-weakening-and-water-stress-is-rising-across-the-tarai>

Rastriya Samachar Samiti. (2026, May 28). Nepal ranks second in South Asia for forest cover. *OnlineKhabar English News*. <https://english.onlinekhabar.com/nepal-ranks-second-in-south-asia-for-forest-cover.html>

Poudel, D. D., & Duex, T. W. (2017). Vanishing springs in Nepalese mountains: Assessment of water sources, farmers' perceptions, and climate change adaptation. *Mountain Research and Development*, 37(1), 35–46. <https://doi.org/10.1659/MRD-JOURNAL-D-16-00039.1>