

Six steps for spring revival in your community

Background

Rainfall begins its journey to the water table by moving through soil, sediment, and rocks before becoming part of groundwater deposits that are known as aquifers. Springs are groundwater discharge points where these aquifers intersect with the surface.

Springs are key sources of water for millions of people in the mid-hills of the Hindu Kush Himalaya (HKH). Used for drinking water, irrigation, and other domestic uses, they are considered a lifeline for both people and ecosystems and help sustain rivers and aquatic life during the dry season.

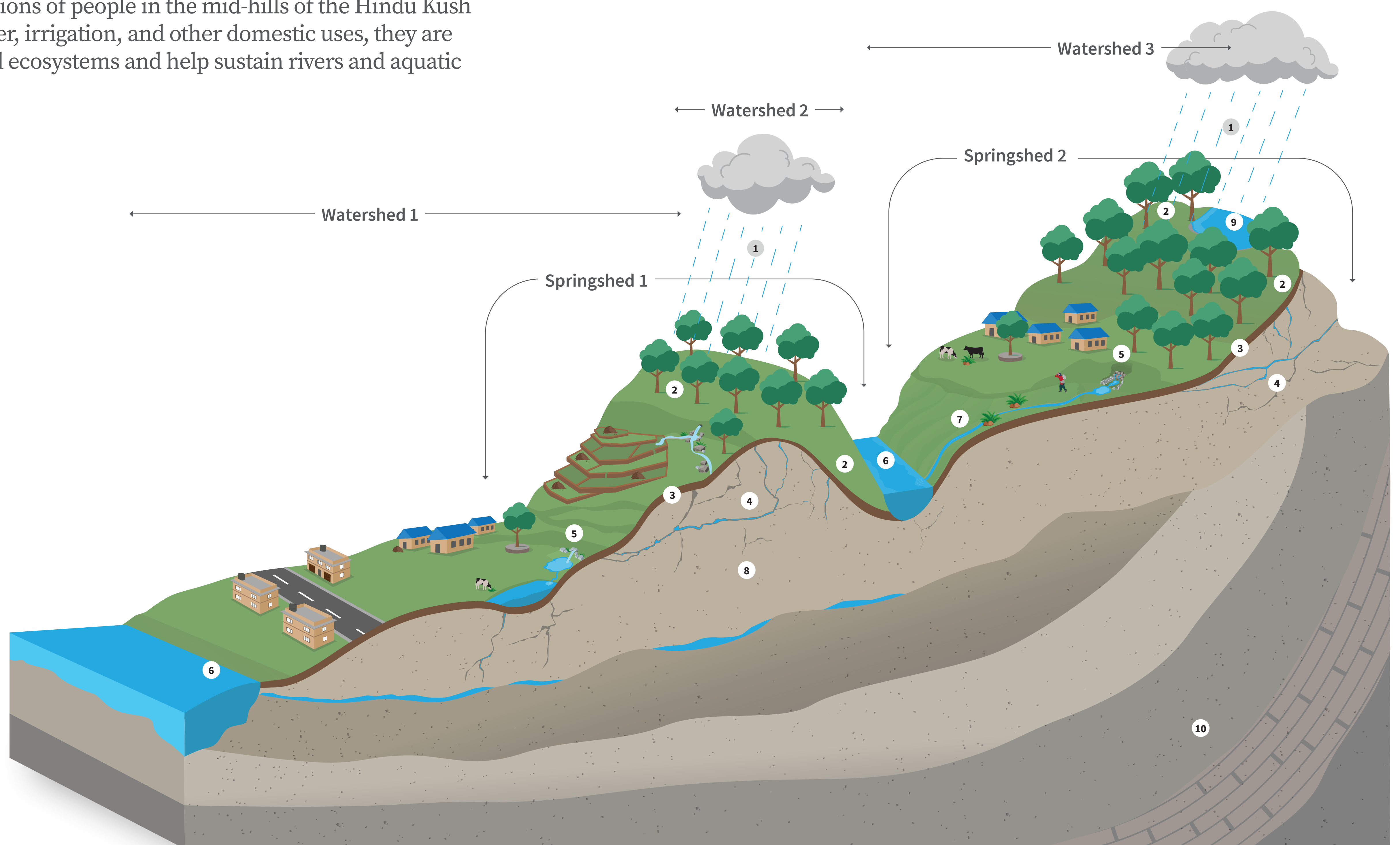
Why conserve springs?

Anthropogenic changes such as deforestation, changes in land use and land cover, infrastructure development, overexploitation of groundwater, and climate change are leading to many springs drying out across the HKH. This poses serious threats to the water security of dependent communities.

What is a springshed?

A springshed is a set of watersheds and aquifers that integrate into a system that supplies water to a group of springs.

1. Rainfall
2. Spring recharge zone
3. Top soil
4. Groundwater flow
5. Spring (groundwater discharge)
6. Stream
7. Runoff
8. Aquifers
9. Pond
10. Bedrock



How can springs be conserved?

A six-step method can be followed to start the process of spring revival. You can also help conserve springs in your community by contributing to these steps.



Mapping

Help identify and map springs and other water resources in your area. Collecting basic information on water resources, geology, and socioeconomic conditions associated with springs can help lay the groundwork for spring revival. Make sure to include ponds, rivers, lakes, and wetlands.



Data monitoring

Help in monitoring the status of springs in your area. Selected springs can be tracked for long-term monitoring of factors such as rainfall, spring discharge, and water quality.



Understanding social and governance systems

Identify institutions and management systems within your community to help initiate spring revival and water management. Which agencies can help you, particularly in your area?



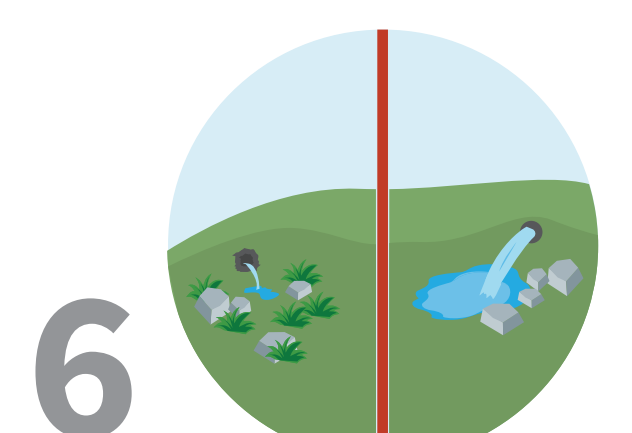
Identification of recharge areas

Work with experts to prepare a hydrogeological conceptual model of springsheds in the community to identify recharge areas for conservation.



Implementation of recharge measures and governance protocol

Have a discussion within your community and identify members who can implement different recharge measures (structural, vegetative, and management). Consider developing and mutually agreeing to a set of rules (dos and don'ts) that will help in protecting springsheds.



Monitoring impact

How have you made impact? Did the water level of your springs increase? Did water quality improve? Did you notice an increase in water flows in the drier months after your interventions? And have you observed reduced workload and time spent fetching water?