

Is a key to climate resilience and sustainable development hidden beneath our feet?

As we near the UN Climate Change Conference in Madrid ([COP 25](#)) and the beginning of the ‘[decade of action](#)’ on the UN Agenda 2030, let’s remember groundwater which is often overlooked in international dialogues and strategies. Recent scientific breakthroughs have highlighted the regional importance of groundwater (*Nature* **572**; 2019) as well as global connections and threats to groundwater. Groundwater resources (*Nature* **488**; 2012) and critical river ecosystems (*Nature* **574**; 2019) are stressed by our groundwater use, which is exacerbated by international trade that moves embedded groundwater (*Nature* **543**; 2017).

Groundwater is a hidden but dependable and ubiquitous water resource that sustains drinking water, food security, and ecosystems throughout the world. It can be used in surprising ways for both climate adaptation and sustainable development. Groundwater is a manageable subsurface ‘sponge’ to floods, a literal ‘water bank’ against droughts, and an important source of water for natural climate solutions that sequester soil carbon. It is also crucial for sustainable development by growing more food and lifting rural populations out of poverty. Unfortunately, long-term depletion, contamination, salinization, and negligent protection of groundwater now threaten this life-giving resource and undermine these essential benefits.

To encourage and support international dialogue and strategies on groundwater solutions for climate adaptation and sustainable development, a global group of scientists, practitioners and experts have recently called for action to ensure that groundwater benefits society now and into the future (see <https://www.groundwaterstatement.org/>). As you grab bottled water (which is most probably groundwater) at COP25 or elsewhere, consider: how could this groundwater contribute solutions to some of the most vexing and pressing problems we face?

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