

Continental Drying: A Threat to Our Common Future

This report addresses the escalating global water crisis characterized by **continental drying**—the long-term decline in freshwater availability across large landmasses—highlighting trends, causes, and impacts on jobs, the economy, and the planet. It presents a comprehensive strategy and policy action road map focused on demand management, supply augmentation, and improved water allocation to address the water crisis.



Trend and causes of continental drying

Global freshwater reserves have significantly declined over the past two decades, leading to the emergence of mega-drying regions.

This loss of freshwater is estimated at **324 billion cubic meters per year**—enough to meet the annual water needs of **280 million people**. At the regional level, this represents about **3 percent** of the annual renewable freshwater supply in the median basin, and it is as high as **10 percent** in already dry basins. Global warming, worsening droughts, and unsustainable land and water use are major contributors to this trend.

Impacts on jobs, the economy, and the planet

Continental drying severely affects agricultural productivity, leading to job losses, income declines, and environmental damages.



Jobs.

In Sub-Saharan Africa, droughts have rendered 600,000–900,000 people jobless annually. The negative effect of water scarcity on jobs is most pronounced in rural farming communities and among women, older individuals, landless farmers, and low-skilled workers.



Income.

Local water shortages can have global economic repercussions because of interconnected trade networks. For example, a 100 mm drop in annual rainfall in India could reduce global real income by US\$68 billion.



Wildfires and biodiversity.

Continental drying increases the frequency and severity of wildfires, posing a threat to biodiversity. A 1-standard-deviation (SD) increase in the rate of freshwater depletion raises the likelihood of wildfires by 27 percent; in biodiversity hot spots, it raises the likelihood by 50 percent.

Mapping water vulnerability and savings potential

Global water use increased by 25% from 2000 to 2019, with nearly half of this increase in regions already drying out. Regions facing the dual crisis of increasing water demand and decreasing supply are identified, with a significant share of water consumption in these drying regions linked to low water use efficiency in the cultivation of water-intensive crops.



Enhancing water use efficiency in agriculture could save substantial amounts of water when paired with effective monitoring and regulations to protect the savings. Globally, aligning the production of key crops with medium levels of global water use efficiency could reduce consumption of freshwater from river, lakes and aquifers by 137 billion cubic meters—equivalent to the annual water needs of 118 million people.

Adjusting cropland distribution to better match water availability within national borders, and reallocating water use from less efficient to more efficient producers and from water-scarce to water-abundant areas across countries through virtual water trade can further increase water savings in drying regions.

Policy Recommendations

The report recommends a three-pronged approach:

- 1. Managing demand,**
 - 2. Augmenting water supply, and**
 - 3. improving water allocation**
- to tackle the continental drying crisis.

Five cross-cutting levers are essential for effective policy implementation:



Strengthens institutions



Optimize pricing and subsidies



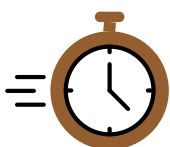
Adopt water accounting



Leverage data and technological innovations



Value water in trade



The time to act is now

Continental drying is a global economic and security threat. National responses and global cooperation are urgently needed to address the crisis. By preserving water we are securing the future of life.