

Extreme water stress affects a quarter of the world's population, say experts

Qatar, Israel and Lebanon top list of places with worst shortages, as climate crisis threatens more

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17 countries including India, home to 1.3 billion people, are identified as having 'extremely high' water stress. Photograph: Pratik Chorge/Hindustan Times/Getty Images

A quarter of the world's population across 17 countries are living in regions of extremely high water stress, a measure of the level of competition over water resources, a new report reveals.

Experts at the [World Resources Institute \(WRI\)](#) warned that increasing water stress could lead to more "day zeroes" – a term that gained popularity in 2018 as Cape Town in South Africa [came dangerously close to running out of water](#).

Qatar, Israel and Lebanon were ranked as the most water stressed countries in the world, with Badghis in Afghanistan and Gaborone and Jwaneng in Botswana the world's most water-stressed regions.

WRI said the data reveals a global water crisis that will require better information, planning and water management.

"Water matters," said Betsy Otto, global director for water at WRI. "We're currently facing a global water crisis. Our populations and

economies are growing and demanding more water. But our supply is threatened by climate change, water waste and pollution.”

The global research organisation compared the water available to the amount withdrawn for homes, industries, irrigation and livestock.

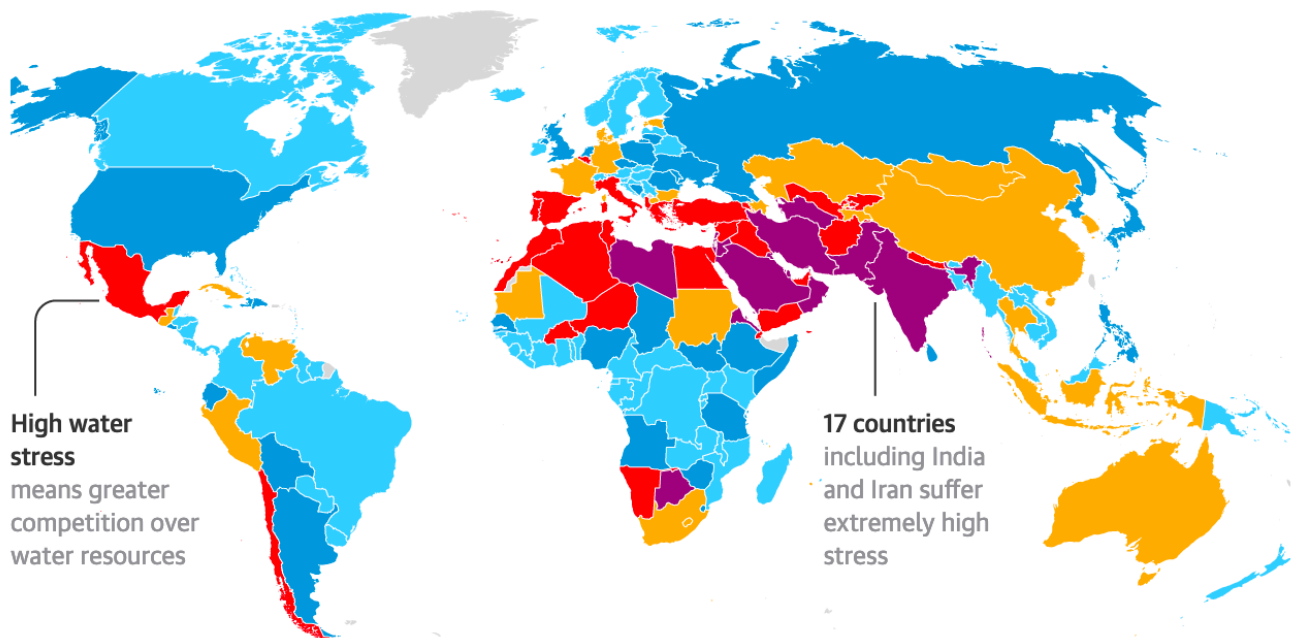
In the 17 countries facing extremely high water stress, agriculture, industry, and municipalities

were found to be using up to 80% of available surface and groundwater in an average year. When demand rivals supply, even small dry spells, which are set to increase because of the climate crisis, can produce dire consequences.

Twelve of the 17 high-risk countries were in the Middle East and North Africa.

A quarter of the world’s population live in countries facing extremely high water stress

Extremely high High High - medium Medium - low Low



Guardian graphic. Source: World Resources Institute aqueduct water risk atlas

The level of water stress in India, a country of more than 1.3 billion people, was striking, experts noted. India ranked 13th in the report.

In July, taps in the southern city of Chennai ran dry and satellite [photographs showing an empty lake](#) in the city went viral on social media.

“The recent water crisis in Chennai gained global attention, but various areas in India are experiencing chronic water stress as well,” said Shashi Shekhar, former secretary of India’s

ministry of water resources, and senior WRI fellow.

Although the US did not have high levels of water stress overall, a handful of states – including New Mexico and California – were found to be facing significant strains on their water supplies that will only intensify with global heating.

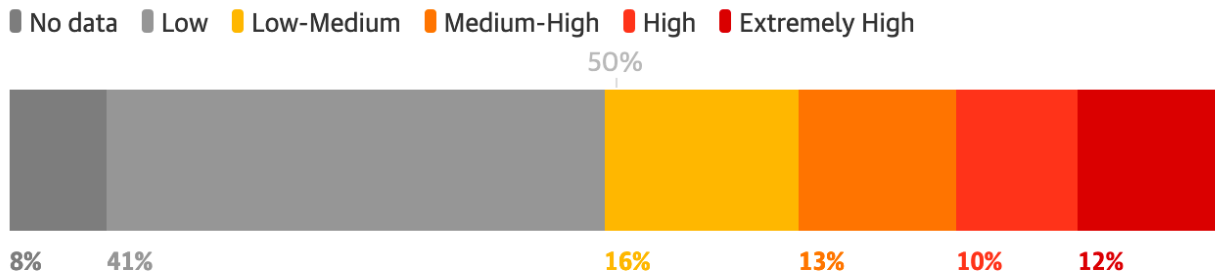
New Mexico was found to have “extremely high” pressure on water availability. The state’s score

is on par with the United Arab Emirates and Eritrea.

In 2012, two-thirds of the US experienced drought, said Brad Rippey, a meteorologist for the Agriculture Department.

California, which experienced a drought in 2011 that did not subside until a couple of years ago, is expected to see huge population growth, while facing temperatures up to five degrees warmer and rising sea levels, said Joaquin Esquivel, chair of the California [Water](#) Resources Control Board.

12% of all sub-national units in the world face extremely high water stress. New Mexico is one of them



Guardian Graphic | Source: TKTKT

World Bank research has [emphasised](#) that “while the consequences of drought are often invisible, they are significant and cause ‘misery in slow motion’”.

The report paints a worrying image of water risk and warns of other social and political problems attached to water shortages.

Around the world, stress on water supplies [can exacerbate conflict and migration](#), threaten food supplies and pose risks for water-dependent industries, including mining and manufacturing, WRI notes.

“The picture is alarming in many places around the globe, but it’s very important to note that water stress is not destiny. What we can’t afford to do any longer is pretend that the situation will resolve itself,” said Otto.

“With respect to climate change we know that in many places what we’re going to be seeing is more erratic, more unpredictable hydrology, precipitation. Either too much or too little, often in the same places.”