Dimming Sun's rays could ease climate impacts in Africa

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The 2017 'Day Zero' drought in South Africa left reservoirs barren

Dialling down the Sun's heat a notch by injecting billions of shiny sulphur dioxide particles into the stratosphere could curtail devastating drought across parts of Africa, new peer-reviewed research has reported.

This form of solar radiation management would slash the risk of another "Day Zero" drought in Cape Town, South Africa—a city of 3.7 million which ran out of water in 2017—by as much as 90 percent, according to a study published last week in *Environmental Research Letters*.

Global warming to date—just over one degree Celsius since the mid-19th century—enhances the likelihood of such droughts by a factor of three, earlier research has shown.

Allowing temperatures to increase another degree to 2C above preindustrial levels would triple the risk again.

The 2015 Paris climate treaty, signed by virtually all the world's nations, calls for capping global warming at "well below" 2C, a goal many experts fear is rapidly slipping out of reach.

As the likelihood that global warming will exceed these limits increases, scientists and policymakers are taking a serious look at "geo-engineering" schemes to cool the planet that were rejected not long ago as dangerous science fiction.

"People working on climate change are waking up to the fact that if cutting emissions doesn't prove sufficient to limit warming to 2C, then blocking out some sunlight could be our only hope of achieving that," Andy Parker, project director for the Solar Radiation Management Governance Initiative, told AFP.

https://phys.org/news/2020-11-dimming-sun-rays-ease-climate.html