

Global South experts urge developing countries to lead on solar geoengineering research

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Writing in *Nature* today, a group of 12 scholars from across the developing world made an unprecedented call for developing countries to lead on the research and evaluation of solar radiation management (SRM) geoengineering.

Solar radiation management is a controversial idea for reducing some of the impacts of climate change. The leading proposal would involve spraying tiny reflective particles into the upper atmosphere, filtering the sun's energy to mimic the cooling effect of volcanoes.

The consequences of solar geoengineering are still uncertain and developing countries could be most affected by its use. SRM would lower global temperatures and so could reduce some of the harmful effects of climate change that affect poor countries, such as higher temperatures, changes to rainfall patterns and stronger tropical cyclones. But it could have unexpected and damaging side effects, could cause international tensions and could distract policymakers from cutting carbon emissions. Without leadership from the Global South, Northern voices will set the policy agenda and developing countries will be left behind.

Most research to date has taken place in Europe and North America. The Comment in *Nature* argues that developing countries have the most to gain or lose from SRM and should be central to international efforts to



understand the technology.

The Comment's co-signatories are a diverse group of distinguished scientists and NGO leaders, all of whom ran pioneering workshops to expand discussion of SRM in their countries or regions: Bangladesh, Brazil, China, Ethiopia, India, Jamaica, Kenya, Pakistan, the Pacific, the Philippines and Thailand.

Dr Atiq Rahman, Director of the Bangladesh Centre for Advanced Studies and the Comment's lead author, said: "Clearly SRM could be dangerous but we need to know whether, for countries like Bangladesh, it would be more or less risky than passing the 1.5C warming goal agreed by the UNFCCC. This matters greatly to people from developing countries and our voices need to be heard".

Prof Paulo Artaxo, a Brazilian physicist and IPCC lead author, who helped organise the first major workshop on SRM in Brazil, agreed: "I support aggressive mitigation and am dubious that SRM will ever be safe enough to use, but developing countries have to lead on research to better understand what it might mean for them".

The Comment is linked to the launch of a new SRM modelling fund for scientists in the South. The DECIMALS fund (Developing Country Impact Modelling Analysis for SRM) will provide grants to scientists who want to understand how SRM might affect their regions. It is being administered by The World Academy of Sciences (TWAS) and the SRM Governance Initiative, with funding support from the Open Philanthropy Project. The call for proposals is open until 29 May 2018 and scientists from across the Global South are encouraged to apply if they would like to better understand the impacts of SRM while stimulating a wider conversation about its risks and benefits.

More information: A. Atiq Rahman et al. Developing countries must



lead on solar geoengineering research, *Nature* (2018). <u>DOI:</u> <u>10.1038/d41586-018-03917-8</u>

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