

Impact of Sea Level Rise on Arsenic Contamination in the Drinking Water in Bangladesh

Keynote:

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Abstract:

Over 170 million people live in Bangladesh. Approximately 97% of Bangladeshis drink well water. Approximately 49% of Bangladesh's area has drinking well water with arsenic (As) concentrations that exceed the 10 micrograms per liter ($\mu\text{g/L}$) World Health Organization (WHO) guideline. This exposure to a potent carcinogen is a significant threat to public health.

About 21% of Bangladesh is flooded each year during a typical monsoon season. As climate change progresses, sea levels will continue to rise, and the area and duration of these annual floods will increase. We hypothesize that these climate change consequences can increase arsenic release from sediments into Bangladesh's drinking well water.