Possible Causes of High Arsenic Concentrations in the Well Water of Bangladesh

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Although existing research provides a good picture of the extent of arsenic contamination in Bangladesh, we do not yet understand the cause of extremely high arsenic levels. We lack sufficient data to determine the time-scale over which arsenic is mobilized from sedimentary material. Some researchers contend that arsenic levels are naturally high because of the particular hydrologic and geochemical conditions of the Bengal Basin. Other researchers point to recent geochemical changes induced by the installation of millions of irrigation wells. This paper provides a review of current knowledge about the extent of arsenic contamination in Bangladesh, geologic and hydrologic conditions, and potential causes of high dissolved arsenic concentrations in well water.