

Arsenic contamination of ground water of Bangladesh

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Arsenic contamination of ground water is a sever hazard in Bangladesh. To clarify the source and mechanism of arsenic release from sediments, geochemical analyses of the Holocene sediments have been carried out in Samta and Deuli villages of Jessore and Mymensingh districts. The peats common in organic mud layers, are characterized by higher concentrations of arsenic (50-260 ppm) compared to the muds and are inferred to be one of the sources of arsenic contamination of groundwater in this region. These peats are characterized by abnormally higher concentrations of uranium (22-59 ppm, U/Th=0.4-5.4). REE patterns of the peats show both cerium and europium negative anomalies which confirm an anoxic stagnant conditions for the deposition of the peats during the higher sea-level.