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**CURRENT STATUS OF ARSENIC CONTAMINATION  
IN DRINKING WATER AND TREATMENT PRACTICE  
IN SOME RURAL AREAS OF WEST BENGAL, INDIA**

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The aim of the present investigation was to draw the current scenario of arsenic (As) contamination in drinking water of community tube well and drinking water treated by tube wells installed with different adsorbent media-based treatment plants in districts Nadia, Hooghly and North 24-Parganas districts, West Bengal, India. As removal efficiencies of different treatment plants varied from 23 to 71%, which is largely governed by adsorption capacity of adsorbent and influencing environmental factors. Though investigated treatment plants removed substantial amount of As from tube well water, high As concentration in treated drinking water was retained after passing through the treatment plants. This high level of As concentration in tube well water and retention of high As concentration in treated drinking water were severe for the consumers which therefore, indicating the improvement of removal efficiency of treatment plant by meticulously considering favorable influencing factors or/and application of other high capacity treatment alternatives to adsorb the excess As retained in drinking water and regular monitoring of As concentration in the treated drinking water are indispensable.

**Keywords:** arsenic, community tube well, drinking water, contamination, treatment plant.

### **Introduction**

Arsenic (As), a naturally occurring element in the earth's crust, is highly toxic metalloid posing serious threat to human health and environment [1, 2] especially in the Gangetic belt of India and Bangladesh during the last few

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