

Assessment of Drinking Water Quality in Relation to Arsenic Contamination in Drinking Water in Liberia: Achieving the Sustainable Development Goal of Ensuring Clean Water and Sanitation

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Abstract : The fundamentals of public health are access to safe and clean drinking water. The presence of arsenic and other contaminants in drinking water leads to the potential risk to public health and the environment particularly in most developing countries where there's inadequate access to safe and clean water and adequate sanitation. Liberia has taken steps to improve its drinking water status so as to achieve the Sustainable Development Goals (SDGs) target of ensuring clean water and effective sanitation but there is still a lot to be done. The Sustainable Development Goals are a United Nation initiative also known as transforming our world: The 2030 agenda for sustainable development. It contains seventeen goals with 169 targets to be met by respective countries. Liberia is situated within in the gold belt region where there exist the presence of arsenic and other contaminants in the underground water due to mining and other related activities. While there are limited or no epidemiological studies conducted in Liberia to confirm illness or death as a result of arsenic contamination in Liberia, it remains a public health concern. This paper assesses the drinking water quality, the presence of arsenic in groundwater/drinking water in Liberia, and proposes strategies for mitigating contaminants in drinking water and suggests options for improvement with regards to achieving the Sustainable Development Goals of ensuring clean water and effective sanitation in Liberia by 2030.

Keywords : arsenic, action plan, contaminants, environment, groundwater, sustainable development goals (SDGs), Monrovia, Liberia, public health, drinking water

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