

Assessment and Mapping of Fluoride Contamination in Groundwater

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Groundwater is the primary source of drinking water use in both rural and urban areas across the globe. However, geogenic, anthropogenic, and climate factors are accountable for groundwater depletion and quality deterioration. The Sustainable Development Goals (6, 2022) aim to increase the global population's safe drinking water supply percentage by 2030. Hence, groundwater monitoring and reporting at regular intervals is essential.

Fluoride (F^-) is an essential element for maintaining the normal development of healthy teeth and bones. However, drinking contaminated groundwater with F^- can cause dental and skeletal fluorosis. Therefore, an assessment of fluoride concentration in groundwater and their mapping is required. The talk focuses on the fluoride contamination in groundwater, the source of fluoride, the risk to human health and the mapping of contaminant zones using a geographic information system (GIS).

References

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