

**USE OF GEOCHEMICAL MAPS IN ENVIRONMENTAL MONITORING,
A CASE STUDY WITH NITRATE, NITRITE AND AMMONIUM IONS**

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The large number of Sri Lankan villagers who use wells are exposed to serious pollution hazards and collection of data on such pollution is timely. Well waters in the Kandy/Matale region were analysed for nitrate,

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nitrite and ammonium ions, and for dissolved oxygen. Geochemical maps were prepared for environmental monitoring on the basis of these analyses.

Geologically weak zones showed seasonal fluctuations in the observed contour patterns. Nitrate levels increase two- to three-fold and supersaturation with dissolved oxygen occurs during the rainy season. Topography, elevational differences, geologic structure, etc. influence the levels of the three ions studied. Higher values for nitrate and ammonium ions were associated mainly with the proximity of pit latrines, population density and the permeability of the well overburden.

References

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