

Impacts of human activities on shallow water wells in

Kinondoni municipality, Dar es Salaam

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This study was aimed at providing an overview of the impacts of human activities on the quality of shallow groundwater resources Kinondoni Municipality. It involved the analyses of physical, chemical and bacteriology parameters of water samples from particular shallow water wells in selected wards that are Sinza, Mwananyamla and Manzese. 30 water samples were collected from Sinza, Mwananyamala and Manzese within one (1) month time it was during rainy season. Water parameters studied include pH, conductivity, TDS, TSS, turbidity, oil and grease, nitrate and *faecal coliforms* through laboratory analysis. The study established that parameters of some of the shallow water wells were above WHO and TBS permissible level for drinking water. Among the analysed samples 50 % were below the recommended value for pH in drinking water, and 10 % were above the recommended value for conductivity and 30 % for TDS. Nitrate 23.33 % of the analysed samples had above the acceptable range for drinking water recommended by TBS. For oil and grease, all the analysed samples were above the environmental permissible level recommended by the TBS. At the same time, 40 % of the analysed samples were contaminated by the *faecal coliform* bacteria. Nitrate and *faecal coliform* contaminations observed in shallow water wells could be attributed to nearby pit latrines and septic tanks. The oil and grease contaminations, on the other hand, were attributed to the presence of garages in the vicinity.