ABSTRACT

Evaluation of Environmental status of Courtallam water.

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Courtallam water quality was evaluated by collecting samples at five sites in order to determine whether there was an increasing pollution load by influx of tourists and pilgrims. The study consisted of surface water quality, ground water quality, awareness about safe drinking water in rural areas and water-borne diseases recorded in the government hospital. In surface water quality hydrochemical and microbiological aspects were assessed. For ground water, only the hydrochemical parameters were studied. Awareness study was carried out through a specially designed questionnaire.

Surface water deterioration was very high at sites II, III, IV and V due to entry of domestic sewage and anthropogenic activities. Pollution load was accelerated by indiscriminate defecation, urination and waste disposal by tourists and pilgrims. Several parameters showed unacceptable levels. Remedial measures should be taken by increasing the facilities available to the tourists; thereby the present load of pollution may be alleviated. The ground water quality was either moderately hard or very hard indicating high dissolved solids in the samples. Large proportions of villagers were aware of safe drinking water and related water-borne disease. Among various water-borne diseases recorded in the hospitals, diarrhoea was predominant followed by typhoid fever, jaundice and very few cases of cholera. As of now, mortality due to water-borne diseases have been prevented even though tourist influx has been increasing year after year with simultaneous reduction in rainfall. Appropriate remedial measures are suggested to preserve the ecosystem of Courtallam.