STUDY ON DRINKING WATER QUALITY PARAMETERS IN THE SOTH EASTERN REGION OF SRI LANKA

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The area of study, southeastern part of Ampara district, is located in the dry zone of Sri Lanka. In order to provide safe drinking water to the rural community in the Ampara district, water supply schemes have been introduced recently. Prior to these water supply projects, the rural community was using the traditional open wells for its daily requirements. In general the quality of water was very poor in these unprotected traditional open wells due to the nature of its construction. Bathing and washing clothes besides these open wells further aggravate this condition.

It is reported that the potential toxin producing cyanobacteria occur in irrigation tanks of this region, from where water is drawn for domestic consumption (Jayawardana *et al.*, 1998). The excessive amount of fluoride ions in drinking water of the dry zone is extensively documented (Dissanayake 1991). This study was undertaken to make a scientific approach to determine the quality of drinking water in terms of biological, chemical and physical parameters.

Water samples were collected in clean bottles from many wells from this area. These samples were tested for their biological, chemical and physical parameters. Water samples collected from water sources were analyzed qualitatively using standard methods.

The result obtained implies that the quality of the drinking water, from most of these water sources, do not conform to the WHO standards. This study will be continued to obtain more data and will be analyzed quantitatively to identify the present problem and to improve water quality in this region.

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