

## **QUALITY OF GROUND WATER IN KUNDASALE**

**J.P. Padmasiri, A. Senaratne and D.G.S.W. Pitakumbura**  
**Kandy District Water Supply and Sanitation Project,**  
**Kandy, Sri Lanka**

The ground water investigation work in Kundasale was started in 1988 by the Kandy District Water Supply and Sanitation Project funded by the Finnish International Development Agency (FINNIDA) and National Water Supply and Drainage Board (Sri Lanka).

The hand pump installed borehole wells for small communities ranging from 100–125 people were undertaken for this study. The higher incidence of hard water in this area when compared with other areas in Kandy is due to the fact that this area is located in the intermediate climatic zone and to geological formations, such as marble and calc gneiss.

The higher levels in the ranges of total hardness of 400–600 mg/l  $\text{CaCO}_3$ , 51–400 mg/l sulphate and total iron above 1.0 mg/L have been identified as  $\text{CaCO}_3$ , sulphate and iron areas respectively. 7.4 percent of the wells required iron removal units to upgrade the quality of water. Bacteriological standards of drinking water were achieved in 80 percent of hand pump wells.