

B-62: Salinity status of water in agro-wells in the Anuradhapura District

K M A Kendaragama

(Field Crops Research and Development Institute, Dept of Agriculture, Maha Illuppallama)

An investigation was conducted during 1992 and 1993 to study salinity status of water in agro-wells and its temporal and spatial variation, using 47 agro-wells and nearby 4 tanks (Paindikulama, Maha Ranamulla, Kunchikulama and Thannayankulama) in the Anuradhapura District for comparison. Electrical conductivity (EC) of well and tank waters was measured during a period of 12 months from February, 1992. EC was expressed at 25°C.

Results showed that mean EC of water in agro-wells and tanks was 1.3 and 0.3 dS/m respectively showing relatively high salt concentrations in well water. This salt concentrations was consistently high throughout the period of investigation, in well water. In addition, all the tanks had either low or medium salinity water. In the case of well water, 17, 12 and 11% of wells contained medium, high and very high salinity water respectively showing a significant spatial variation in well water salinity.

Most of the agro-wells in the Anuradhapura district contained saline water with a significant spatial variation in water salinity, possibly due to occurrence of salt deposit or salt accumulations in soil. It shows the importance of considering water quality aspects in the identification of suitable locations for wells in order to avoid areas having saline water.