Abstract No: 14

## PUBLIC ACCEPTABILITY OF TREATED SURFACE WATER FOR POTABLE PURPOSE: CASE STUDY IN VAVUNIYA

## M.A.O.D. Mathara Arachchi\* and S. Devaisy

Department of Bio-Science, Faculty of Applied Science, Vavuniya Campus of the University of Jaffna, Vavuniya 43000, Sri Lanka \*okiladulanjali@gmail.com

The low public acceptance is one of the major challenges in implementing and succeeding surface water intake projects for potable purpose. The water treated from Per-Aru reservoir is the source of water supplied by the National Water Supply and Drainage Board (NWSDB) for some parts of Vavuniya district. The low public demand towards the use of treated water is one of the obstacles faced by the NWSDB in operating the plant. Thus, the objective of this study was to assess the public acceptability towards the use of Per-Aru treated water for potable purposes in Marakarampalai area located in North-west part of Vavuniya. This study area was selected as it purely receives treated water from Per-Aru Water Treatment Plant for water supply. Questionnaire survey was conducted between two groups of sample population; beneficiaries (those who have NWSDB water connection, n = 40), and non-beneficiaries (those who do not have NWSDB water connection, n = 40) in Marakarampalai area. The questions were focused to assess the satisfaction towards the treated water among the beneficiaries and to assess the willingness/constraints to obtain water supply among non-beneficiaries. Results showed that half of the beneficiaries use the treated water for potable purposes as they are aware of the periodic water quality checkups. However, the rest only uses for non-potable purposes as they do not trust the quality of water for potable purposes. More than half of the beneficiaries obtained the water supply connection mainly to get rid of water shortage issues in dry season. It was noticed that the people those who have access to alternative water sources are not willing to get water connection paying extra bills. For non-beneficiaries, financial constraints and lack of awareness are the major factors to get the water connection. The provision of financial benefits and environmental education programmes by the NWSDB can be encouraged to enhance the public demands towards the use of treated water.

**Keywords**: Acceptane, Per-Aru, Potable, Public, Treated water.