SOLAR DISTILLATION: A METHOD OF TREATING SALINE WATERS FOR SMALL COMMUNITIES

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ABSTRACT

This paper presents a study made to determine, in scope and nature, the engineering feasibility of solar distillation assisted water supply scheme to be utilized for small communities especially in the rural areas of developing countries. Primary emphasis has been devoted to the examination of solar distillers because of their governing nature in such a system. Three solar stills of different geometrical configurations were constructed and tested. A sample sea water of upto 40,000 ppm. salinity was prepared and used. Partial water quality analysis was carried out for both raw saline water and the produced drinking water. The results manifested that solar distillation may well adopt to small communities of low water demands and dwelling in the areas of high solar insolation.

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