

EVALUATION STUDY OF SOLAR WATER DESALINATION SYSTEM FOR SALINE TRACK AREA OF VIDARBHA REGION

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ABSTRACT

Performance of solar still was evaluated with evacuated tube collector by distilling four water samples collected from different location. The distillate yield from solar still depends on the temperature difference between the water in basin and inner glass cover. Higher the difference, the greater is the yield. The integration of evacuated tube collector with solar still increased the water temperature as well as distillate yield. The daily yield of 8 litre for 0.03 m water depth in basin was obtained in normal sunny days of summer season. The biological and chemical analysis of initial water sample and distillate water sample revealed that the distillate water was fit for consumption.

KEYWORDS: Distillate Yield, Evacuated Tube Collector, Solar Still, Water Depth