

Strategies for Increasing Fresh Water Supplies in Deficit Areas at India

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KEYWORDS GIS. RS. E-Still. Reverse Osmosis. Potable Water

ABSTRACT Over population, pollution, deforestation and natural disasters are among the major problems faced by the world today. The increasing population and industrial development have put further pressure on the supply of fresh water. Water stress is thus on the increase and it has been predicted that by the year 2025, 40% of the developing countries that are facing a population explosion will experience water stress. Agricultural and other economic activities can only be successfully carried out if there is sufficient fresh water. This paper explores the use of new and innovative techniques such as Remote Sensing, GIS, and GPS in identifying areas, which need to increase its fresh water supply. India suffers from water shortage in the summer season due to very few spells of rainfall. Fresh water demand is peak in summer. Existing methods of fresh water generation are reviewed and recommendations made about the adoption of these technologies. The usage of seawater is becoming popular nowadays because of the inability to meet the ever-increasing demand for fresh water is increasing daily. The E-Still Steam distillation equipment is an example to get distilled water for drinking in the rural areas where fresh water is insufficient. This is useful to engineers and planners who have to plan and provide adequate fresh water supplies to sustain life in deficit areas. GIS as a computer-based tool for mapping and analyzing spatial data and events that take place in this earth is also a useful tool for water management aspect. GIS and RS can help us locate the area where there is acute shortage of water and whether the area is near the sea. This information can be presented clearly in the form of maps with reports allowing the decision makers to have a complete scenario of the problem and can hence focus on the real problems and other issues.