

# Performance Analysis of Desalination Plants in UAE: Accentuating the Potential Issues in the Process of Integrated Waste Management and Future Prospects

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**Full Text**

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## Abstract

There are more than 199 desalination plants that are located in different regions, such as the United Arab Emirates, Saudi Arabia, Kuwait, Qatar, Bahrain, Egypt and other countries. The desalination plants that are located in UAE accounted for 35% of water generation in the year 2013 and are the main source of drinking water in the country. Desalination plants carry out activities that are associated with the cleaning and purification of water that has been collected from the sea. By using several filtering and purification processes, the desalination plants make seawater fit for drinking and help in meeting the water demand of the individuals. The present study aims to understand the performance of desalination plants in the UAE and outline the way forward to overcome the prevailing challenges. To reach the major objectives, a quantitative research approach has been implemented using quantitative data. Structured questionnaires have been used as primary data which is close-ended in nature. A simple random sampling method had been used for the selection of candidates suitable for the study. The sample unit mainly consisted of 150 specialists who are involved in the process of desalination in the UAE. Statistical tools, such as Chi-square and SPSS methods had been adopted for the analysis of the collected data and to acquire accurate results. Further, findings and discussions have been evolved using statistical tools. Limitations and future aspects are also implemented.

## Keywords

Desalination plants, UAE, Integrated waste management, issues, prospects

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