TEMPORAL AND SPATIAL CHANGES IN GROUNDWATER QUALITY OF LAKSHADWEEP ISLANDS, INDIA

K. Md. Najeeb and N. Vinayachandran

Central Ground Water Board (SWR), Bhujal Bhavan, 27th Main

7th cross Sector-1, HSR Layout, Bangaluru

E-mail: kmdnajeeb@rediffmail.com

Abstract

The aquifer system of coral islands in Lakshadweep archipelago is fragile and sensitive to meteorological and oceanographic parameters. The dimension and quality of freshwater lens in these islands vary in time and space. The tidal influence, seasonal changes in recharge and draft, and marine aerosols play a significant role in the groundwater quality of these Islands. The seasonal changes in the dimension of freshwater lens have a direct bearing on the lateral and vertical changes in water quality. Marginal improvement in water quality is observed during high tide in peripheral areas of fresh water lens.

Keywords: Lakshadweep, Marine aerosols, Aspect ratio, Freshwater lens, Coral islands.