

Desalination in Algeria: Current Situation and Development Programs

R. MITICHE ; M. METAICHE ; Ahmed KETTAB ; Fadila AMMOUR ; S. OTMANI ; Samia HOULI ;
S.TALEB; A. MAAZOUZI

Abstract: Algeria, like other southern Mediterranean countries, is enduring water shortage which will get worse over the few next years. Algeria is known as the most severely threatened country by water stress and scarcity by early 2020. One of the important factors exacerbating this problem is the concentration of three quarters of the inhabitants and consequently the industrial and agricultural activities along the 1200 km coastal zone, which has led to an increase in the pollution of the existing water resources. Droughts due to climate change and pollution are the most important factors destabilizing the existing balance. Therefore, the desalination of sea water can provide a solution to one of the most urgent and vital problems? of balancing and enhancing water resources, as the wide variation of rainfall, from more than 2000 mm/y in the north coastal region dropping to less than 100 mm/y in the southern Sahara, should be taken into account. Given these circumstances, we will focus on the need for desalination, the desalination program and strategy, in addition to other non-conventional water resources that might guarantee the optimal conditions for integrated management and sustainable development.

Keywords :Africa; Dynamical climatology; Environmental protection; Sahara; Algeria; Sustainable development; Integrated management; Rain; Seawater; Climate change; Drought; Water resources; Pollution; Coastal zone; Desalination.