

Significant Geogenic and Anthropogenic Factors Concerning Contamination of Groundwater Resources in Afghanistan

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ABSTRACT

In recent years, the groundwater quality in Afghanistan has raised some concerns as far as very few studies exist about its quality. The main reason behind the little knowledge about groundwater quality is that the country is recovering from decades of war and instability. Being one of the main and reliable sources for drinking, public and private institutions have started some initial investigations from the last few years to examine groundwater quality through the entire country. Still, it will take some time to complete such a broad study. In this article, an extensive review of the literature about the groundwater quality of Afghanistan is conducted where the existing raw data is analyzed as well to obtain some important results and indicate them scientifically. In addition, some major geogenic and anthropogenic factors that are threatening groundwater of the country are outlined in order to be considered for future and more in-depth investigations. The existence of Arsenic in groundwater is one of the critical issues discussed in the article where in some provinces, it considerably exceeds the acceptable limits of the World Health Organization (WHO) and the National Drinking Water Quality Standard (NDWQS) of Afghanistan for Arsenic in drinking water. The existing groundwater quality in some areas of the country concerning human health, especially child mortality is also addressed in brief.

Keywords:, Arsenic, Groundwater Quality, Geogenic Factors, Afghanistan