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Investigating salinity and radioactivity in water resources in Morocco
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Another effort in the field has involved researchers from the United States of America and Morocco. Morocco is one of the most arid regions of the world and based on many IPCC climate models annual rainfall is expected to decrease over the next few decades. With increasing demands for drinking water and irrigation the water crisis in Morocco is expected to become exaggerated. Nevertheless, the high salinity of groundwater has become a limiting factor for sustainable management of the water resources, and therefore has important implications for future economic development and social and political stability in Morocco. They investigated the groundwater quality (with a focus on the effects of salinity and radioactivity) of four major basins in Morocco (Souss-Massa, Draa, Ziz, and Tadla) during field sampling taking place annually since the beginning of the project. In the following months the relationship between salinity, water hydrochemistry, aquifer lithology, and levels of radioactivity will be investigated, in an attempt to establish a prediction tool for radioactivity in water resources. The project also seeks to identify the potential alternative water resources for substituting existing groundwater resources in the Souss-Massa basi, via assessment of the suitability of saline groundwater as a source for reverse osmosis desalination and the sustainability of using fossil and geothermal waters as alternative water sources. Work is complete on salinity and radioactivity maps and these results are being shared with experts from the National Office of Drinking Water (ONEP) Agadir and the Regional Office of the Agricultural Development of Souss-Massa (ORMVASM).

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Web site:

<http://duke.edu/web/sfpmorocco/Home.html>