



Saira HASHMI

Home Country

Pakistan

Degree

PhD in Environmental Engineering

Expertise

Water Resources

Research Focus

Water Policy Resource Management Issues in United Arab Emirates

Host University

Harvard University, Massachusetts, United States

Fellowship Awarded 2008

Saira Hashmi is originally from Pakistan but grew up in Saudi Arabia. In her leisure time she enjoys glass painting, photography and working out.

After obtaining her undergraduate degree in civil engineering at the University of Engineering and Technology in Lahore, Pakistan, Saira obtained her master's degree in engineering and applied sciences with a focus on atmospheric chemistry at Harvard University in the United States. She is currently pursuing a PhD in Environmental Engineering with a concentration on water resources.

Her research focus at Harvard is on water scarcity and water policy resource management issues in the city of Abu Dhabi, United Arab Emirates (UAE). In the face of increasing water scarcity issues in the region, she is developing a model that will integrate all sources and uses of water into one model, including rainfall, groundwater and surface water, water treatment, reuse and recycling of water, alternate technologies and the quality of water received from desalination plants along with environmental, social, economic and political constraints and policies.

Her objective is to create a model that will help in maximizing reuse of water sources and minimizing water consumption by investing in appropriate and efficient water-saving technologies along with unconventional water resources within the city. Her proposed model will provide different cost analyses of newly available technologies and may be used to minimize investments in water management systems and to maximize social benefits. This will help in pricing water and in the evaluation of future water demands. While based on the city of Abu Dhabi, her model is applicable at a global level and is particularly appropriate for emerging and developing economies.

Saira plans to teach in Saudi Arabia after her graduation from Harvard.