

Women and Water Homework Instructions

In response to a United Nations Resolution recognizing the imperative of access to clean water and sanitation, use what you have learned from the situations in Kenya, Trinidad, and India, to suggest remedies to a water problem in Pakistan.

United Nations Resolution:

Lack of access to water kills more children annually than AIDS, malaria and measles combined, while the lack of sanitation affects 2.6 billion people, or 40 percent of the global population. Each year, more than 3.5 million people die from diseases spread by contaminated water. The United Nations calls upon states and international organizations to provide financial resources, build capacity, and transfer technology in an attempt to provide safe, clean, accessible and affordable drinking water and sanitation for all, particularly for people in developing countries. The draft resolution urges developed nations to provide resources and to foster the transfer of technology to developing countries with a view to providing improved access to water and sanitation.

Pakistan Scenario:

Pakistan is one of many developing countries in which drinking unsafe water causes health problems such as cholera, typhoid and diarrhea. Each year millions of people there are infected by waterborne diseases—in fact, some 80 percent of stomach disorders are caused by drinking contaminated water.

In Faisalabad, Pakistan, a city of more than 2 million people with heavy industrial pollution and poor water infrastructure, bacteriologically-contaminated water from drains was being allowed to mix in canals and rivers, making those water sources unsafe for either drinking or irrigation. At the same time, the level of the groundwater beneath the city was falling, so much so that almost on a day-to-day basis, pumping the groundwater to the surface was becoming increasingly difficult. Despite such circumstances, people had little awareness of the adverse health effects caused by drinking contaminated water and the benefits of using safe, pathogen-free drinking water.

For several years, some government and private agencies provided safe water to the people of Faisalabad on a commercial basis for a nominal fee. However, the

city's poorest people could not afford to pay for water. In such circumstances, people chose to drink untreated water.

One possibility that could have helped in this situation was the use of solar water disinfection (SODIS), a simple, low-cost, and effective technique for making contaminated water safe to drink. It involves filling plastic bottles with surface water and exposing the bottles to sunlight for several hours. The ultraviolet light in the sun's rays effectively kills off most of the harmful bacteria. The technique was developed and promoted worldwide by the Department of Water and Sanitation in Developing Countries of the Swiss Federal Institute for Environmental Science and Technology (SANDEC/EAWAG) and found to be particularly effective with women and children. Another possibility that could have helped would have been collection of rainwater from rooftops, subsequent storage in barrels, and disinfection with bleach before use.

On the basis of what you learned of the situations in Kenya, Pakistan, and India, what recommendations would you make to meet the need for safe drinking water in Faisalabad, Pakistan, and the expectations of the United Nation Resolution? Students should write two paragraphs (minimum 250 words in total) explaining their relevance to the hydrologic cycle. In the opinion of the student, what would be most helpful to women in this situation in Global South? Have the students hand in their paragraphs for a grade as a summative assessment and in order to see if they are able to use the hydrologic cycle to explain why some populations may be helped to obtain access to a reasonable supply of fresh water and why this is a matter of environmental justice.