**Water Access and Health**

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**Target/Learning objectives**

After the lesson, the students should know:

* The importance of clean drinking water in terms of water borne diseases
* What are some diseases related to drinking water in Africa
* How clean drinking water can prevent disease
* Drinking water quantity in Sweden compared to Africa

Students should also be able to reflect on:

* Water sanitation issues in other parts of the word
* The value of clean drinking water to health and well-being
* Personal water use quantities

**Time**

About 90 minutes

**Materials**

Videos

<http://www.youtube.com/watch?v=iRGZOCaD9sQ>

<http://www.youtube.com/watch?v=BCHhwxvQqxg>

Charts

<http://chartsbin.com/view/1455>

**Articles**

<http://www.who.int/water_sanitation_health/en/factsfigures04.pdf?ua=1>

<http://www.un.org/en/globalissues/water/>

<http://thewaterproject.org/water-in-crisis-rural-urban-africa>

<http://www.theguardian.com/news/datablog/2009/mar/03/access-water>

<http://www.un.org/millenniumgoals/pdf/MDG%20Report%202012.pdf>

**Sources**

World Health Organization. (2006). Meeting the MDG drinking water and sanitation target: the urban and rural challenge of the decade. Retrieved from <http://www.who.int/water_sanitation_health/monitoring/jmpfinal.pdf>

<http://everylittledrop.com.au/knowledge-center/water-consumption-around-the-world/>

The Swedish Water & Wastewater Association. Facts on Water Supply and Sanitation in Sweden.<http://www.svensktvatten.se/Documents/Kategorier/Om%20Svenskt%20Vatten/Facts%20on%20Water%20Supply%20and%20Sanitation%20in%20Sweden%20(English).pdf>

Institute water for Africa. (2014). Water consumption. Retrieved from:

<http://www.water-for-africa.org/en/water-consumption.html>

**Background**

The aim of our project is to inform students of the importance and the challenges associated with drinking water, especially in Africa, where a large part of the population do not have access to safe drinking water. We believe that it is important to bring awareness to Sweden’s teenargers about the importance of having safe drinking water and helping them realize the value of free access to clean drinking water in Sweden. By showing a panorama about Africa’s situation regarding drinking water and health issues, we aim to create a sense of awareness in “how valuable it is to have safe access to drinking water” in their home country. We believe that it is important to learn and understand that the process for obtaining drinking water is complex in many parts of the worlds, especially in Africa.

According to the United Nations, 782 million people or 11% of the global population remain without access to an improved source of drinking water (Millennium Development Goals Report, 2012). Africa as a whole, especially Sub-Saharan Africa, faces huge challenges with multiple issues that adversely affect public health, especially in sub-Saharan Africa. In that region, only 16% of people had access to drinking water through a household connection, such as indoor tap (World Health Organization, 2006). By contrast, 100% of the population in Sweden has sustainable access to improved drinking water sources (The Guardian, 2009).

There are limited sources of water available to provide clean drinking water to Africa’s population, since surface water sources are often highly polluted and there is a lack of infrastructure to pipe water from fresh and clean sources to arid areas (The Water Project). Moreover, overcrowding in urban areas makes it even more difficult to control sanitation issues and disease outbreaks associated with exposure to raw sewage. Within this context, the implications of the lack of clean water and access to adequate sanitation are widespread, especially considering that it causes the deaths of millions of young children. Diarrheal illnesses, Schistosomiasis (related to unsanitary excreta disposal and absence of nearby sources of safe water) and Hepatitis A are the main diseases related to water issues among Africa’s population (World Health Organization, 2004). Those diseases could be prevented by clean water and good hygiene.

**Student Task**

Class begins with the student activity.

Gather students in small groups of 3-4. Students will reflect on personal water use during a typical day. List the specific ways they use water during a day such as handwashing, showering, cooking, drinking and flushing the toilet. They should try to give a possible amount of water they think they use per day. Discussion time, approximately 20 minutes.

After the first discussion, the moderator will ask the students to distribute 20 liters of water throughout the tasks they perform throughout the day. How much water for showering? For cooking? Washing hands? Etc. Then, students will reflect on whether 20 liters seems like enough to meet their needs throughout the day. What activity do the students tend to distribute more of the 20 liter towards? Which activities do the students omit from their day with this water quantity constraint? Discussion, approx 20 minutes.

Next, the moderator will explain the true average values of the quantity of water used in Sweden compared to Africa. They will show a video about water access in Africa and its impact on an African’s everyday life. Film and lecture: 10-15 minutes.

After the film, the moderator opens the floor up for discussion and reflections as a whole group. The moderator will ask questions such as: How would your life change if you could only use 20 liters of water a day? How would it affect you if you had to gather your water yourself? Discussion: 10 minutes.

Moderator then brings discussion over to health issues and asks some questions for discussion and reflection. How would it affect you if the quality of the water you used is not certain? How would you use water differently if you weren’t sure if it is was safe to drink? How do you think you could clean the water? Discussion: 10-15 minutes.

Moderator sums up the discussions and reflections and takes into account the background information provided above.