More people in the world have cell phones than access to a toilet. Unlike wars and natural disasters, inadequate water and sanitation, conditions do not make media headlines. Yet, such conditions exist despite statistical evidence demonstrating that poor water and sanitation conditions claim more lives through disease than any war claims through guns. Lack of clean water and sanitation is a “silent disaster” with major health consequences. In 1990, the proportion of people without access to safe drinking water and basic sanitation was alarming. To address this disaster, world leaders at a UN summit meeting in 2000, signed a Millennium declaration that set forth eight goals to be achieved by 2015. One goal was to reduce by half extreme poverty. Other goals included reducing by half the number of people without access to clean water and sanitation. Today in 2012, the goals for reducing extreme poverty and providing safe drinking water have been met. Since 1990 more than 2 billion people have gained access to clean water. However there are still 780 million without adequate water.

In 2010, the UN General Assembly declared safe and clean drinking water and sanitation a fundamental human right. Unfortunately, the goal on sanitation has not made much progress. At present, Over 2.5 billion people are without available or adequate sanitation of any kind. As a result, the health consequences are devastating: diarrhea is a major cause of death each year in 1.5 million children under five. Up to 75% of all diseases in the third world are directly related to inadequate water and sanitation conditions.

Concerted efforts, however, have shown that such conditions can be improved. Even in very poor countries there is evidence of some success; e.g. in Malawi more than 7 million people, about half of its population, have now gained access to potable drinking water. Similar results are seen in Burkina Faso and Gambia. Similar efforts are urgently needed for sanitation, as well.
Unsurprisingly, women are more affected in areas where water and sanitation resources are inadequate. In most societies women and girls bear the prime responsibility for collecting water for the entire family, as well as managing household and human waste. Although women now have considerable knowledge concerning the need for clean water and sanitation, they are frequently excluded from planning and decision making. Furthermore, girls often spend hours collecting water which prevents them from going to school.

UNICEF has an active WASH (water, sanitation and hygiene) program as well as a campaign, using smart slogans like "hurry up! 2.6 billion want to use the toilet". They use a catchy poem:

Jack and Jill went up the hill
to fetch a pail of water
after drinking the water
Jack died of Cholera
and Jill died from amoebic dysentery

How much water is there? "Water, water everywhere but not a drop to drink" laments Coleridge in his poem Rime of the Ancient Mariner. Approximately 97% of the water on this planet is in the ocean and not drinkable because of the salt content (to address the salt issue, Israel and Saudi Arabia have a massive desalination program underway. It is however expensive and uses much energy). Most of the remainder is locked in Antarctic ice caps or deep underground leaving less than 1% available for human use in freshwater lakes and rivers. Water is mostly a renewable resource. Globally there is enough to go around for drinking and agriculture which uses most of it. The problem is that some countries get a lot more than other countries. The access to water is often one of storage, poor management and dumping of waste in rivers.
More money must be assigned for improving sewage systems and infrastructure for clean water. A review of history is important and necessary.

People living in rich countries are only dimly aware how clean water and sanitation have fostered progress in their own country. Just over a hundred years ago London, New York and Paris were centers of infectious diseases and the death rate, especially of children, was high. The movement for sanitary improvement and its sweeping reforms has led to the assignment of adequate funds for building and maintaining sewage systems as well as the infrastructure for clean water. By one estimate, the development of water purification has led to a great reduction in mortality in the US in the first third of the 20th century. In England, in the decades since 1880, the improvement and expansion of sanitation has led to an unprecedented 15 year increase in life expectancy.

Water resources often cross political boundaries in the form of rivers, lakes and aquifers. This hydrological interdependence raises issues of conflict and cooperation. Conflicts do arise but most are resolved peacefully. For example, during two wars between India and Pakistan, a treaty on water sharing survived. Another example is water cooperation between Israel and Jordan, under UN auspices, in the early 1950s when the countries were still at war. These and other examples demonstrate that hostile enemies often cooperate on interests in water. It is hoped that such cooperation between countries will occur in future cases of interdependence.

The right to water and sanitation is vital to life. In the past 20 years governments have tried to hand over the responsibility for clean water and sanitation to the private sector. The hope was that multinational corporations have the expertise and the financial resources. It is well known that private corporations exist to make profit and the poor are
often unable to pay the high fees. Thankfully, many governments are now aware of this and are returning water and sanitation administration to public hands. Paris, the heart of French private water companies, decided in January 2010 to reclaim public ownership.

Water and sanitation must be for the public good and available to all. Dr. Sylvain Ehrenfeld, the IHEU and National Ethical Service representative to the UN, and Dr. Reba Goodman, member of BECS and the Department of Pathology, Columbia University NYC.