

## Water & Health

It is estimated that 2.6 billion people around the world do not have access to adequate sanitation. Lack of access to safe and clean water affects impacts every aspect of life. Nearly 443 million school days are lost each year due to water related illness. Moreover, 3.6 million people die every year from



**water-borne diseases**, nearly all of which occur in developing countries. More deaths result from waterborne disease than from guns and war combined. **Cholera, malaria, typhoid, diarrhea, and dehydration** are some of the illnesses resulting from an unsafe or inadequate water supply, yet are all illnesses that can be treated at a relatively low cost since one of the key contributors to unsafe drinking water is the improper disposal of human waste.

The World Health Organization explains that inadequate water supplies are both a cause and effect of **poverty**: Those without adequate and affordable water supplies are the poorest in the society and the effects of inadequate water supply (disease, time and energy spent in daily collection, high unit costs, etc.) intensifies the poverty trap.

Water is the base for all life and yet millions of people are living without a safe and adequate supply. A person can only survive for three days without any water. In addition to our survival, water also plays a vital role in our **nutrition**. All of the food we eat – from fruits and vegetables to hamburgers and fries – needs water. Water is used to grow plants, feed animals, process the food, transport it, and much more.



### Questions to consider:

- How does water get contaminated? What are the concerns with unsafe drinking water?
- What parts of the world are most affected by unsafe water?
- What factors prevent people from having safe water?
- How do we clean contaminated water? What innovations have been created to address the poor water quality in many developing countries?
- Is access to clean water a human right?
- What role does water play in agriculture? What is the water footprint for agriculture?
- What type of diets use the most water?
- If the water supply is contaminated, how does that affect food and agriculture?
- What do farmers do when there is not enough water?
- What conflicts have arisen due to water scarcity affecting farmers?

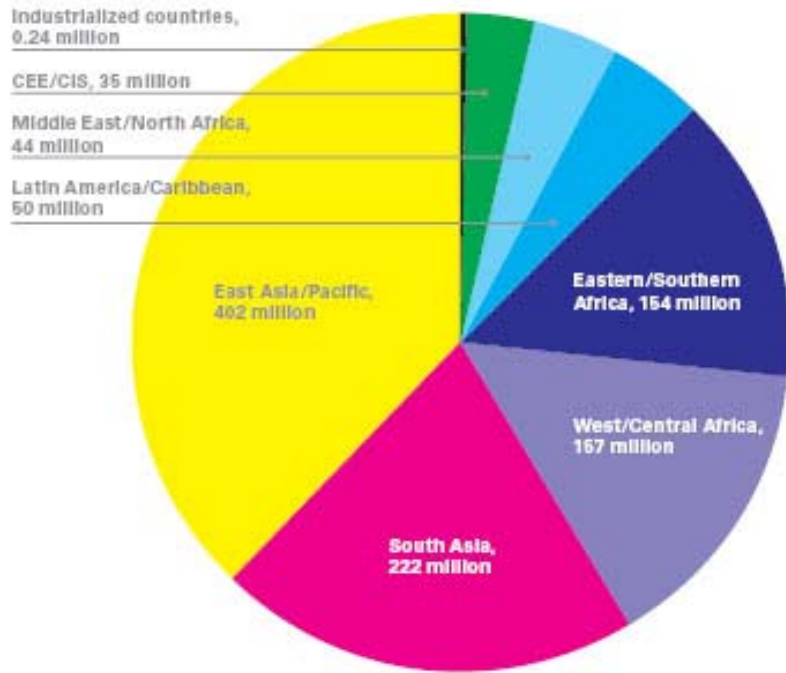
### Key Terms

- |                    |               |                 |                             |
|--------------------|---------------|-----------------|-----------------------------|
| - Aqueduct         | - Chlorine    | - Irrigation    | - Wastewater                |
| - Aquifer          | - Cholera     | - Latrine       | - Water Rights              |
| - Basic Sanitation | - Dehydration | - Malaria       | - Waterborne Disease        |
| - Borehole         | - Diarrhea    | - Pastoralist   | - World Health Organization |
| - Water Well       | - Dysentery   | - Potable Water |                             |
| - Brackish Water   | - Filter      | - Typhoid       |                             |
|                    | - Freshwater  | - UNDP          |                             |
|                    | - Hygiene     | - WASH          |                             |



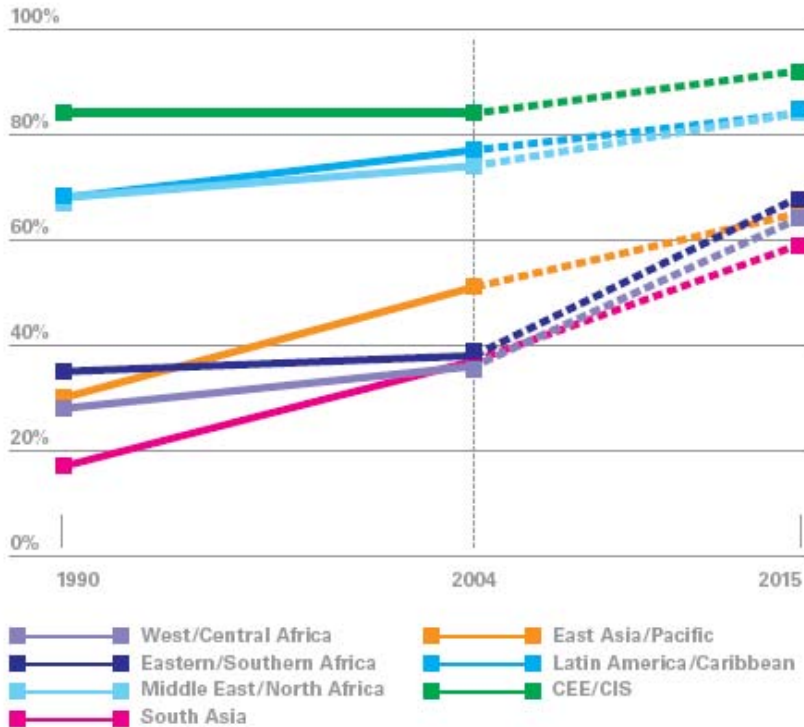
**More than 1 billion people are without access to improved drinking-water sources.**

The chart shows the regional breakdown.



**Regional trends towards the MDG sanitation target**

Middle East/North Africa, East Asia/Pacific and Latin America/Caribbean are on track to meet the target of halving the proportion of people without access to basic sanitation. West/Central Africa, Eastern/Southern Africa and CEE/CIS are not on track, and South Asia has made progress – but not enough to reach the target.



The solid lines show coverage levels in 1990 and 2004. Dotted lines show progress that will need to be made to reach the targets.

From: [http://www.unicef.org/publications/files/Progress\\_for\\_Children\\_No.5-English.pdf](http://www.unicef.org/publications/files/Progress_for_Children_No.5-English.pdf)