

Access to safe water is a fundamental human need and therefore, a basic human right. Contaminated water jeopardizes both the physical and social health of all people. It is an affront to human dignity.”

-United Nations Development Programme.

THE WORLD WATER CRISIS

Nika

THE MILLENNIUM DEVELOPMENT GOALS

In September 2000, at the UN millennium summit, world leaders committed themselves to a set of eight time-bound measurable Millennium Development Goals

Goal seven is about ensuring environmental sustainability its target is to halve by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation. This objective will require greater support from developed nations, new policies and new technologies in the developing world. Water was asserted as a Human Right by the United Nations in 2002 in their General Comment No.15. This clarified the obligation for governments to extend access to sufficient, affordable, accessible and safe water supplies and to safe sanitation services as their resources allow. While progress has been made on realizing the MDG goal of halving the number of people without access to safe drinking water and sanitation, population growth has caused the realization of the goals by 2015 to be virtually impossible. In fact at the current rate, the Sub-Saharan Africa is unlikely to meet the MDG sanitation target until 2076.

THE FACTS ARE COMPELLING

The worlds population has tripled in the 20th century,while the use of renewable water resources has grown six-fold. In the UK the expansion of sanitation infrastructure in the 1880s contributed to a 15 year increase in life expectancy in the following four decades.

Global Population Circa **1900**



2 billion people

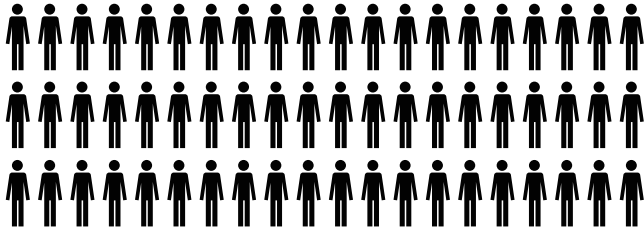


 = 100,000,000 people

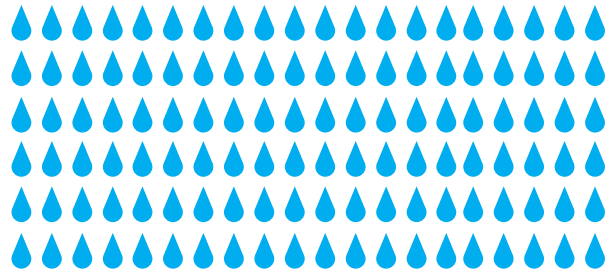
 = renewable water resources per 100,000,000 people

 = 100,000,000 people who lack access to safe drinking water

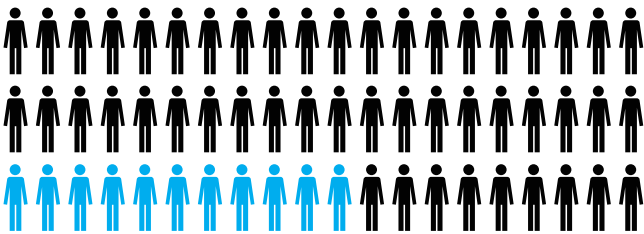
Global Population Circa 2000



6 billion people

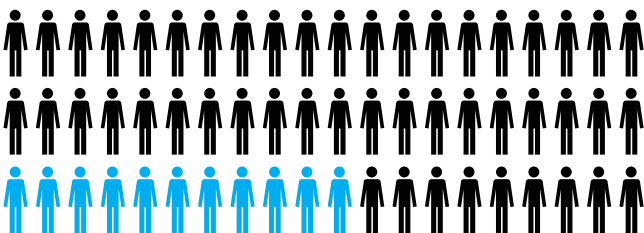


Global Population Circa 2005



The United Nations estimates that in 2005, **1.1 billion people** lacked access to safe, affordable, drinking water

Global Population Circa 2005



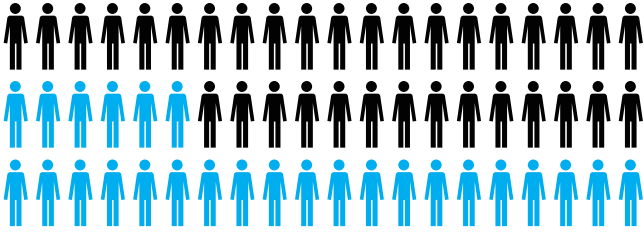
That's
20%
of the global population

 = 100,000,000 people

 = renewable water resources per 100,000,000 people

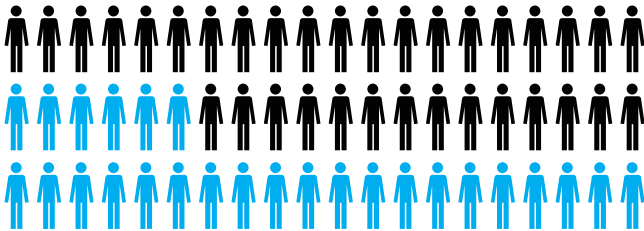
 = 100,000,000 people who lack access to safe drinking water

Global Population Circa 2005



The same year **2.5 billion people** lacked access to clean sanitation

Global Population Circa 2005



That's
40%
of the global population

While the world's population tripled in the 20th century, the use of renewable water resources has grown six-fold. Within the next fifty years, the world population will increase by another 40 to 50 %. This population growth, coupled with industrialization and urbanization, will result in an increasing demand for water and will have serious consequences on the environment.

 = 100,000,000 people

 = renewable water resources per 100,000,000 people

 = 100,000,000 people who lack access to safe drinking water

**PEOPLE ARE
DYING**

In many areas of the world, good municipal water is unavailable. Unsafe water and lack of sanitation causes 80% of all sickness and disease, and kills more people every year than all forms of violence, including war. Water-related disease alone is the second biggest killer of children worldwide.

In 2004, **2.2 MILLION** PEOPLE DIED
due to unsafe drinking water

That's

6,000

DEATHS PER DAY.

SUNDAY
MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY
SUNDAY



90%

were children
under the age of 5



APPROXIMATELY 20% OF THE WORLD'S POPULATION HAVE INADEQUATE ACCESS TO WATER AND 40% OF THE POPULATION LACK BASIC SANITATION?

THE AVERAGE AMERICAN USES 100 GALLONS OF WATER PER DAY? THOSE LIVING IN POVERTY USE LESS THAN 5 GALLONS PER DAY.

APPROXIMATELY 1.8 MILLION CHILDREN DIE EVERY YEAR AS A RESULT OF DIARRHOEA? MORE THAN 443 MILLION SCHOOL DAYS EACH YEAR ARE LOST AS A RESULT OF WATER BORNE DISEASES.

MILLIONS OF WOMEN SPEND SEVERAL HOURS EVERY DAY WALKING TO GET WATER? MILLIONS OF GIRLS ARE UNABLE TO ATTEND SCHOOL BECAUSE OF THEIR WATER DUTIES AND CHORES. THE WEIGHT OF WATER CARRIED BY WOMEN AND GIRLS IS THE SAME AS THE AVERAGE US AIRPORT LUGGAGE ALLOWANCE.

MORE THAN 4,500 CHILDREN DIE EVERY DAY FROM DISEASES CAUSED BY UNCLEAR WATER AND POOR SANITATION?

APPROXIMATELY 1.8 MILLION CHILDREN DIE EVERY YEAR AS A RESULT OF DIARRHOEA? THE SIMPLE ACT OF WASHING HANDS WITH SOAP AND WATER CAN REDUCE DIARRHOEAL DISEASES BY 40%.

MORE THAN 4,500 CHILDREN DIE EVERY DAY FROM WATER BORNE DISEASES? AN INTEGRATED APPROACH OF PROVIDING WATER, SANITATION AND HYGIENE REDUCES THE NUMBER OF DEATHS BY AN AVERAGE OF 65%.

THE WORLD'S POPULATION IS EXPECTED TO GROW FROM 1.6 BILLION PEOPLE IN 1900 TO AN ESTIMATED 9 BILLION PEOPLE BY 2050? WATER AVAILABILITY WILL BE ONE OF THE CRITICAL ISSUES OF THE NEXT GENERATION.



97.5% OF THE EARTH'S WATER IS SALTWATER? IF THE WORLD'S WATER FITTED INTO A BUCKET, ONLY ONE TEASPOON WOULD BE DRINKABLE.

AT ANY ONE TIME, HALF OF THE DEVELOPING WORLD'S HOSPITAL BEDS ARE OCCUPIED BY PATIENTS SUFFERING FROM WATER-RELATED DISEASES?

WATER-RELATED DISEASES ARE THE SECOND BIGGEST KILLER OF CHILDREN WORLDWIDE, AFTER ACUTE RESPIRATORY INFECTIONS LIKE TUBERCULOSIS?

THE AVERAGE LIFE EXPECTANCY IN DEVELOPED COUNTRIES IS 30 YEARS GREATER THAN IN DEVELOPING COUNTRIES? HALF OF THIS DIFFERENCE IS CREDITED TO SANITATION AND WATER SYSTEMS.

IT'S ESTIMATED THAT A \$9 BILLION INVESTMENT WOULD ACHIEVE UNIVERSAL ACCESS TO CLEAN WATER AND SANITATION. EUROPE SPENDS MORE THAN \$11 BILLION PER YEAR ON ICE CREAM.

THE HUMAN BODY IS 50 TO 70 PER CENT WATER AND NEEDS A REGULAR SUPPLY OF CLEAN WATER TO MAINTAIN HEALTH?

AN ESTIMATED \$9 BILLION INVESTMENT WOULD ACHIEVE UNIVERSAL ACCESS TO CLEAN WATER AND SANITATION? EUROPE AND THE US SPEND MORE THAN \$12 BILLION PER YEAR ON PERFUME.

A CHILD DIES EVERY 15 SECONDS FROM A WATER-RELATED DISEASE?



EACH DAY IN DEVELOPING COUNTRIES, WOMEN AND GIRLS SPEND MORE THAN 200 MILLION HOURS COLLECTING WATER FROM DISTANT, OFTEN POLLUTED SOURCES?

THE AVERAGE DISTANCE A PERSON LIVING IN RURAL AFRICA MUST WALK TO A WATER SOURCE IS FIVE MILES? GIRLS OFTEN CAN'T GO TO SCHOOL BECAUSE COLLECTING WATER TAKES UP SO MUCH OF THEIR TIME.

THE UN SAYS THAT 95% OF THE WORLD'S CITIES DUMP RAW SEWAGE INTO THEIR WATER SUPPLIES? 80% PERCENT OF THEIR HEALTH PROBLEMS CAN BE TRACED BACK TO UNSANITARY WATER.

WATER RELATED DISEASES KILL MORE PEOPLE EVERY YEAR THAN ALL FORMS OF VIOLENCE, COMBINED?

OF THE 30,000 DEATHS THAT OCCUR EVERY WEEK FROM UNSAFE WATER, 90% ARE CHILDREN UNDER 5 YEARS OLD?

WHEN YOU FLUSH THE TOILET, YOU ARE USING THE SAME AMOUNT OF WATER THAT A PERSON IN THE DEVELOPING WORLD USES ALL DAY TO WASH, CLEAN, COOK AND DRINK?

EVERY DOLLAR INVESTED IN WATER YIELDS AN ECONOMIC RETURN OF EIGHT DOLLARS SAVED TIME, INCREASED PRODUCTIVITY AND REDUCED HEALTHCARE COSTS?

OVER 76 MILLION PEOPLE WILL PERISH FROM WATER-RELATED DISEASE BY 2020 UNLESS URGENT ACTION IS TAKEN?

The earth is becoming more crowded



Within the next forty-five years, the world population is estimated to increase by 2.6 billion people and the bulk of this increase will occur in areas that are the least developed. This population growth, coupled with continued industrialization and urbanization of developing countries, will result in a heightened demand for water and an increase in polluted water, both of which will have serious adverse consequences on the environment. Sadly, the availability of clean water in many underdeveloped areas of the world is extremely scarce as once dependable rainfall patterns are failing to replenish the local water table. http://en.wikipedia.org/wiki/United_Nations \o "United Nations" United Nations estimates that in 2005, 1.1 billion people (20% of the global population) lacked access to safe, affordable, drinking water, and 2.6 billion people (40% of the global population) lacked access to safe sanitation. About 80% of those lacking such access live in sub-Saharan Africa, Eastern Asia and Southern Asia. Without creative solutions to increase the availability to clean water, these impoverished communities around the world will continue to languish.

Water related disease



Water-related diseases are one of the most devastating consequences resulting from a pervasive lack of clean water, destroying not only lives but also local economies. In 2004 alone, 2.2 million people died due to unsafe drinking water, most of which were children under the age of 5. This amounts to around 6,000 deaths a day. In addition, it is estimated that 50% of all hospital beds in the developing world are currently occupied by patients with diarrheal illness as a result of exposure to contaminated water. If the world does not act to provide basic access to clean water, as many as 135 million additional people will die from these water-related diseases by 2020. On top of the massive death toll, local economies and household budgets are drained by the constant need to purchase expensive medicines in order to combat the effects of consuming polluted water. The solution to ending the cycle of poverty and disease in these impoverished communities is crystal clear: investment in the creation and strengthening of basic sanitation infrastructures to provide access to clean water. Improving sanitation infrastructure in these impoverished communities could reduce diarrhea-related deaths in young children by more than one-third and if hygiene promotion is added, such as simply teaching proper hand washing, deaths could be reduced by two thirds. Access to water must be a human right that all can enjoy and yet globally, it does not exist.

Women and children are socially disadvantaged.



The lack of available clean water has other detrimental social consequences as well. Without the basic availability of toilets and in order to maintain their social dignity, women are forced to defecate only in secluded areas at night, making them susceptible to violence. Furthermore, in the rural areas of many developing countries, women and children are not able to acquire an elementary education because they are required to provide water each day to their family or village. This can mean up to a 5-mile walk, one way, only to arrive at a river, pond or stream contaminated with bacteria. Furthermore, the containers used to transport water usually hold about 15 liters of water and weigh up to 15 kilograms. Such a physically difficult and time consuming responsibility means that these women and children are not able to go to school due to fatigue or simply because they are not afforded the time. In addition, many young women in these areas are marrying between the ages of 12 and 16 years. By keeping these women in school, they can become educated and potentially avoid marrying at such a young age. This ultimately benefits the local community as older, more educated women might opt for smaller, more economically manageable family sizes resulting in more moderate population growth and

less pressure on available resources. As surprising as it sounds, these positive changes all start with providing clean water to these families and their children so they can sustain safe and healthy lives and have the time and the strength to start and finish school.

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