

## Water footprint

*“We shall not finally defeat AIDS, tuberculosis, malaria, or any of the other infectious diseases that plague the developing world until we have also won the battle for safe drinking-water, sanitation and basic health care.” Kofi Annan, former United Nations Secretary-General*

Water is the most essential requirement for all living things – including humans – as it makes up 60 to 70% by weight of all living organisms. It is no exaggeration to say that “water is life”.

Yet, despite being so vital to life, water it is one of the most unevenly shared out resources of all. For example, in Britain, the average person uses 160 litres of clean water each day; in rural Ethiopia, people use on average around 5 -10 litres a day per person. That means that the average person in the UK has a water footprint 16 to 32 times larger than the average person in rural Ethiopia!

### **So what is your water footprint?**

Put simply, this is the amount of water you use, e.g. drinking, cooking, washing, cleaning, leisure activities such as swimming, and flushing down the toilet. But your water footprint also includes the resources, land, space and energy involved in supplying this water.

**Why not try to measure how many litres of water you use every day?**

### **The water footprint: how it measures up**

- One child dies every eight seconds because of unclean water or poor [sanitation](#)
- At least 1 in every 6 people in the world does not have access to clean drinking water.
- An estimated 1.6 million lives could be saved annually by providing access to safe drinking water, sanitation and hygiene.
- Agriculture and farming is responsible for about 80% of all freshwater used.
- Households in rural Africa spend about a quarter of their working day collecting water
- Pakistan spends 47 times more on the military than on water and sanitation – it is not alone; many countries spend more on guns than on water taps
- Just 1 flush of a toilet uses more water than most Africans have to use in a day

For more fascinating facts and figures on water visit the [WaterAid website](#)

### **Did you know?**

Water can be fresh but never new. All the water in the world, in the ice caps, the oceans, the clouds, in the rivers and under the ground, is about a billion years old. There’s always been the same stock of water on Earth, it just moves around the planet, changing to ice or seawater or rain. People can move it around too, **but** – we can’t get any more of it! We’ll just have to use our water stock carefully. And the tiny percentage of the Earth’s water that humans can drink – about 3% is fresh water – is ancient too. It could just be that a dinosaur once drank your next gulp of water!

### **Water: saviour and killer**

Water is Life! But it can be a killer too. Access to clean water and sanitation is one of the most important guarantees of good health. Dirty water on the other hand can harbour serious illnesses and diseases. At any one time, close to half the population of the developing world is suffering from [water-related diseases](#). Children are especially at risk as their bodies are less developed than adults', and so less able to resist illness. Many children miss school because of illnesses caused by problems with water and sanitation. For more information on water and health see a [UNICEF factsheet](#)

### **A disastrous footprint**

Water can also be a disaster! Too much or too little water is responsible for the vast majority of [natural disasters](#). In the last 10 years or so, 90 % of natural disasters were due to water-related events, and they are on the increase. Two out of every five people now live in areas

vulnerable to floods and rising sea-levels. Floods affect more regions and more people than any other disastrous event. Flooding increases health risks by contaminating drinking water and destroying [sanitation](#) systems. Also people who have lost everything in a flood – their homes, their food, their livelihood – are also more vulnerable to disease. Droughts are also a severe threat to health as they often worsen [malnutrition](#) and [famine](#), and make access to adequate water supplies much more difficult.

### **The poor walk, but the rich leave their footprint**

The feet of poor people often walk many miles each day to collect water; but it is those in rich countries that have the large water footprint. If people don't have access to water where they live they have to collect it from somewhere else. Women and children — particularly girls — may spend hours every day collecting water. The time spent collecting water means women can't do paid work and children can't go to school. And if the water collected is dirty or contaminated, families get ill, which also prevents them from working or going to school. So, without safe water and basic sanitation people simply cannot escape poverty.

#### **Did you know?**

In Tanzania, 12% more children were found to attend school when safe water was available within 15 minutes from their homes rather than one hour away.

### **A large water footprint leaves some trampled under foot**

Sometimes, plenty of water for some means much less water or even no water for others. For example, large farms and factories can use huge amounts of water, leaving less for people to meet their basic needs like drinking, cooking and washing. Large industries can also cause pollution and so spoil people's water supply, making it unsafe to drink. Sometimes the building of large dams for [hydroelectricity](#) can force people to move away from rivers that have provided water, or flood their homes, forcing them to move to drier areas.

And to make matters worse, poor people with a small water footprint often pay more for their water than the rich with their large water footprint. In Kibera in Kenya, Africa's largest slum, people pay three times more for their water than people in New York or London. This is because water pipes often don't reach poorer areas and so slum dwellers face a choice between buying water from expensive private traders or taking a long trip to the nearest – often dirty – stream.

#### **Did you know?**

For communities without safe water, getting access to such water is nearly always their first and most important priority.

### **Water as a basic human right**

The United Nations believes that access to clean water is one of the most fundamental rights and that without it most other rights cannot be met. Article 24 of the United Nations Convention on the Rights of the Child states that:

“You have the right to good quality health care and **to clean water**, nutritious food and a clean environment so that you can stay healthy.

There are other rights that are important when it comes to water:

Article 2 says that children should have the same rights and access to facilities whether or not they are disabled and whether they are a boy or a girl.

Article 12 states that children have a right to participate in matters that affect them. So, children and young people should clearly be involved in promoting, managing and designing water and sanitation projects, and in educating each other about hygiene.

Article 28 is also crucial. The article states that governments must do everything possible to encourage attendance at school. But illnesses from water-related diseases or lack of sanitation facilities disrupts education and the lack of clean, separate and private toilets at school is one reason why children (particularly girls) miss school.

Finally, Article 24 also states that rich countries should help poorer countries achieve this.

Given all this it is extraordinary that rich countries have actually been cutting the amount of money they provide for water and sanitation programmes in poor countries in recent years.

For further information on the Convention on the Rights of the Child [click here](#)

### **Did you know?**

A special Children's World Water Forum was held in Mexico City in March 2006. One hundred and seven young people from 29 countries across the world met government ministers to discuss how children can help solve the world's water problems. The young people called for action from governments to fulfil the human right to safe drinking water supplies and basic sanitation. They called for facilities in all schools and communities, taking special notice of the needs of girls, very young children and children with disabilities. The young people had much more to say! For the full text from the Children's World Water Forum see: [http://www.unicef.org/voy/explore/wes/explore\\_2711.html](http://www.unicef.org/voy/explore/wes/explore_2711.html)

**Why not have a go at writing your own water manifesto?** Use the information and links provided in this section to help you. When discussed and finalised, you could send it to a government minister and ask for his/her response!

### **Millennium Development Goals**

The eight Millennium Development Goals (MDGs) were agreed at the United Nations Millennium Summit in September 2000 and nearly 190 countries have signed up to them. The goals are international targets for reducing global poverty. They aim to lift around 500 million people out of poverty by the year 2015. If this happens, fewer women will die in childbirth, fewer people will die from treatable diseases, many more boys and girls will go to school and the lives of millions of people will improve dramatically.

As part of the seventh MDG – to ensure environmental sustainability – all UN member states have pledged to halve the number of people without access to safe drinking water by 2015.

Providing access to water and sanitation is also vital if the other Millennium Development Goals are to be achieved, such as alleviating poverty, hunger and malnutrition; reducing child mortality; increasing gender equality; providing more opportunity for education; and ensuring environmental sustainability.

If the goal of halving the number of people without access to water by 2015 is to be met, an extra 150,000 people a day, every day will need to get access to clean water. That requires huge efforts by governments. But for many in poor countries – particularly some parts of Africa – clean water just hasn't received the focus it needs to achieve this goal.

### **Did you know?**

It would cost an estimated extra **US\$16 billion** each year to reach the goal of halving the proportions of people without access to safe water and sanitation. This is less than North Americans and Europeans spend on pet food in one year!

For more information on the Millennium Development Goals [click here](#)

### **Did you know?**

#### **One large footprint often leads to another...and another...**

A large footprint in one area often leads to a large footprint in other issues too!

For example, visiting a foreign country usually means we fly – travelling by plane is by far the most environmentally damaging way to travel, giving us a gigantic [transport footprint](#) [link to transport info] and [carbon footprint](#) [link to climate change info]. When we get to our destination we often stay in hotels that use large amounts of water – swimming pools, golf courses, showers etc; in some countries tourists can more than double the local population during the hottest driest times of the year and lead to serious water shortages, leaving local people without any water. So we end up with a large and damaging [water footprint](#).

Sometimes water is also used to irrigate all those exotic fruit and vegetables we enjoy on holiday; grown on land and using water that could be used to produce food for local people instead. So, holidays can leave you with a large [food footprint](#) [link to food info] too!

***Can you think of other ways in which taking one large step leads to another large step...and another?***

### **Hope for a more equal water footprint**

Robbing Peter to pay Paul – or taking from the rich to benefit the poor – is rarely popular. But it seems that doing this can help bring clean, safe water and sanitation to some of the world's poorest families and communities. In South Africa for example, all water companies are forced to provide a certain amount of water free of charge. This may mean charging those who can pay, a little more. But surely this is a small price to pay for providing clean water to those whose very life depends on it.

### **Case studies**

[UNICEF](#) Real life stories of children and young people around the world who are benefiting from, and contributing to, water and sanitation projects in their communities.

[WaterAid](#) Short case studies of children who have lived their lives with dirty water and how they have been helped to make life better.

### **Putting your foot down: taking action to reduce your water footprint**

#### **Reduce your use of water**

We have looked at how a large footprint in one area leads to a large footprint in another [link to: 'Did you know? One large footprint often leads to another...and another...'] The reverse is also true: by reducing your water footprint, you can reduce your impact in other areas too. Using less water means less energy is used in getting the water to your tap. Also, the more water saving habits we get into the fewer problems we will have when there is a drought and the more water there will be to go around.

### **Campaign for water for all**

As aware and active global citizens we can work to persuade governments of the importance and urgency of helping to deliver clean water and sanitation to everyone in the world. Here are some groups campaigning on the issue of water; they provide information on how to campaign effectively and how to get involved:

[End water poverty](#)

[Water Aid](#) – contains some useful fundraising ideas

[UNICEF action](#)

### **School or Community water events**

There are two important United Nations initiatives which provide excellent opportunities for a

school, classroom or community focus on water.

The first is **World Water Day** held every year on March 22<sup>nd</sup>. Every year the UN highlights the dangers of inadequate access to safe water and basic sanitation and promotes the importance of these to helping lift people out of poverty and poor health. See the [World Water Day](#) website for details.

The second initiative is the **Water for Life Decade**. The primary goal of the 'Water for Life' Decade is to put pressure on the international community to meet the commitments they made on water by 2015. See the [Water for Life Decade](#) website for details

### Learn more

→ For more information about food download our Global Footprints leaflet on water [click here](#) (link to pdf download)

→ Links:

[BBC Water debate](#) – lots of information and discussion about the water crisis

[One World TV](#) – watch a series of short videos on water and water related issues health

[World Water Council](#) – an organisation which aims to promote awareness and trigger action on critical water issues

[Oxfam Water For All resource](#) (for teachers)

### Glossary

**Developing world:** A collective term used to describe the world's developing countries: countries where average income is very low and most of the population are considered very poor. Other terms used include low-income countries, majority world, the South or the Third World.

**Famine:** a serious shortage of food which may result in extreme hunger, starvation and death.

**Hydroelectricity:** Electricity produced from the energy of flowing water. Water flows through a turbine, spinning the blades, which rotates a generator, producing electricity. Such electricity usually involves damming a river so that there is a large amount of water that can fall to spin the turbine blades.

**Hygiene:** keeping healthy through practices such as washing hands after using a toilet and before handling food.

**Malnutrition:** Not having enough nourishing food with the adequate amounts of protein, vitamins, minerals, calories, etc. to support growth and development.

**Natural disaster:** An event which has harmful effects on people and the environment and is caused by natural forces rather than by human action. Examples include floods, drought, earthquakes, volcanic eruptions and hurricanes. Some would argue that human activity can make natural disasters worse, e.g. cutting down trees can make increase floods and mudslides and climate change may result in more severe storms.

**Sanitation:** the safe and hygienic removal of waste including human waste, through proper toilet and sewage systems for example, as well as protecting health through hygienic measures.

**Water-related diseases:** Illnesses, diseases and infections which people catch through contaminated water. There are many different diseases and illnesses but diarrhoea accounts for 90% of all water-related diseases. The effects of water-related diseases are devastating: every 15 seconds, a child dies; water-related diseases are the leading cause of death for

children under five, and at any given time, half of the world's hospital beds are occupied by patients suffering from a water-related disease. See the following links for more information on water-related diseases:

[UNICEF](#)

[Water Aid](#)