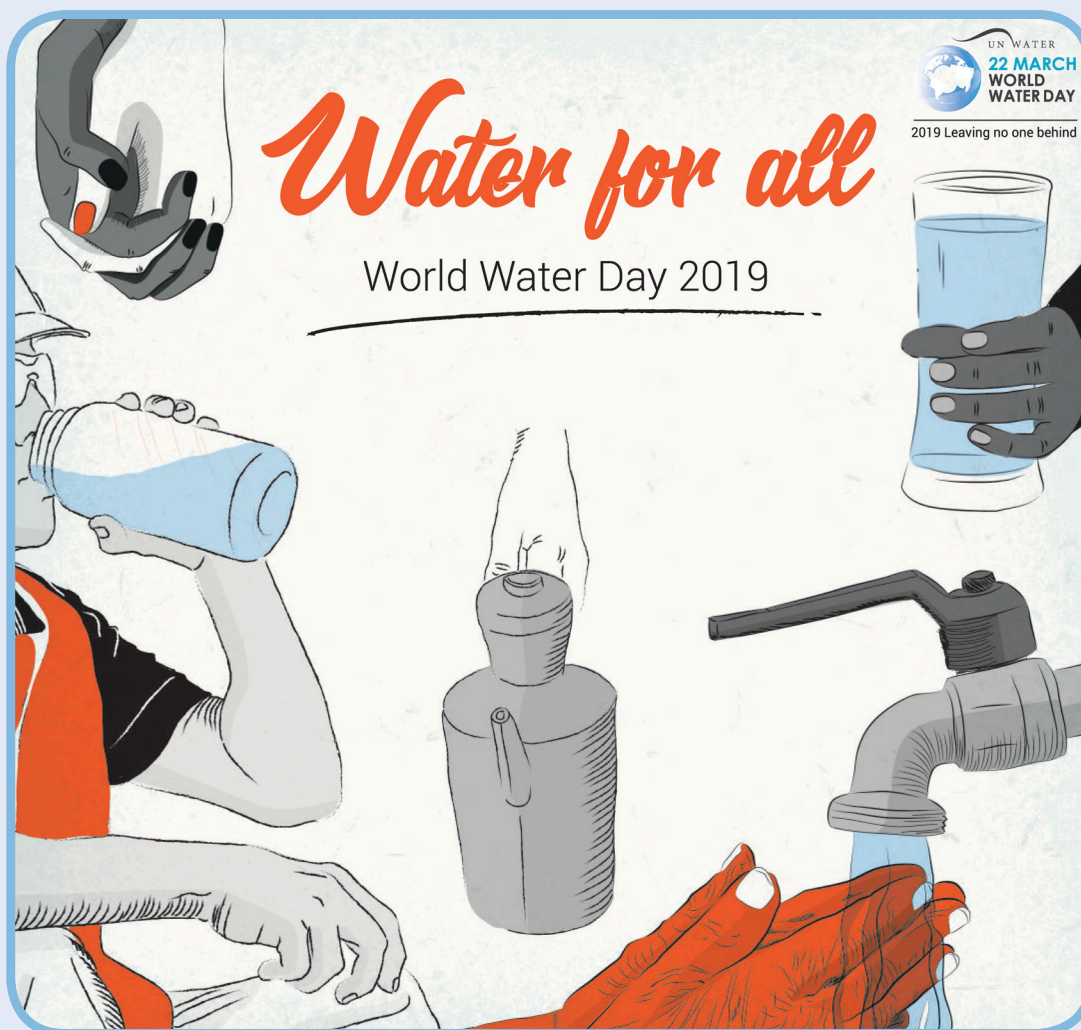


2019

World Water Day Education Pack

World Water Day 22 March 2019,
'leaving no one behind'



2019 World Water Day Education Pack

Watercare's World Water Day Pack:

Research and development: Sally Smith, education co-ordinator

Layout and design: Barb Pendrey, graphics specialist

Acknowledgements: Steve Camp, Di Martin and Kerry Jenner

Watercare Services Limited

73 Remuera Road, Remuera, Auckland 1050

Private Bag 92 521, Wellesley Street,

Auckland 1141

www.watercare.co.nz

March 2019

2019 World Water Day Education Pack

Thank you for requesting Watercare's World Water Day Pack. You will find:

Contents	Page
What is World Water Day 2019?	1
Goal 6 targets	1
2019 theme – No one left behind	2
The facts	3
Water supply	4
Lack of basic sanitation	5
Education	6
Lack of water = lack of equality	6
Hunger and nutrition	7
Extreme weather and climate change	9
War and conflicts	9
Poverty	9
Illness and disease	11
Water and young children	12
Challenges and solutions	14
What can you do?	15
What is your role in water preservation?	15
Other water charities	17
Interactive activities	19
More water activities for the classroom	21
Wear Blue Day	22

2019 World Water Day Education Pack

**Living Water International Gary Evans puts it this way: “We’re in a world where there are 900 million people barely treading water, and the water’s too low for them to reach the ladder. They don’t need a boat. They don’t need a helicopter to rescue them. They just need a little boost so they can reach the ladder. Then they can climb out on their own. Clean water provides that boost.”*

*Living Water International is a faith-based, non-profit organisation that helps communities in developing countries to create sustainable water, sanitation and hygiene (WASH) programs in response to the global water crisis.

What is World Water Day 2019?

World Water Day on 22 March every year aims to bring the world's attention to the importance of fresh water.

World Water Day is about taking action to tackle the water crisis. Today, there are over 844 million people living without a safe water supply close to home, spending countless hours queuing or trekking to distant sources, and coping with the health impacts of using contaminated water.

World Water Day tries to remind people about the significance of fresh water and to promote sustainability for fresh water resources' management. It's a day to celebrate water. It's a day to prepare for how we manage water in the future.

All 193 United Nations member states observe this annual day and this demonstrates the global concern around this topic; the severe waste of water from developed countries and the lack of clean and safe water for developing countries.

The Sustainable Development Goals, launched in 2015, include a target to ensure everyone has access to safe water by 2030, making water a key issue in the fight to eradicate extreme poverty.

Goal 6 targets

- By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- By 2030, improve water quality by reducing pollution, eliminating dumping and minimising the release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of fresh water to address water scarcity and substantially reduce the number of people suffering from water scarcity
- By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
- By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

What is World Water Day?

Goal 6 targets *continued*

- By 2030, expand international cooperation and capacity-building support to developing countries in water and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
- Support and strengthen the participation of local communities in improving water and sanitation management.

2019 Theme – No one left behind

At a time of immense global challenges – poverty, inequalities, natural disasters, humanitarian crises and forced displacement – the 2019 edition of World Water Day looks at why people have been left behind and how access to water and sanitation and sustainable water management can be drivers of change.

Water for all implies that also elderly, disabled, marginalized and poor people get access to clean drinking water and proper sanitation.



Activity

You can learn more about past World Water Day themes on our website:

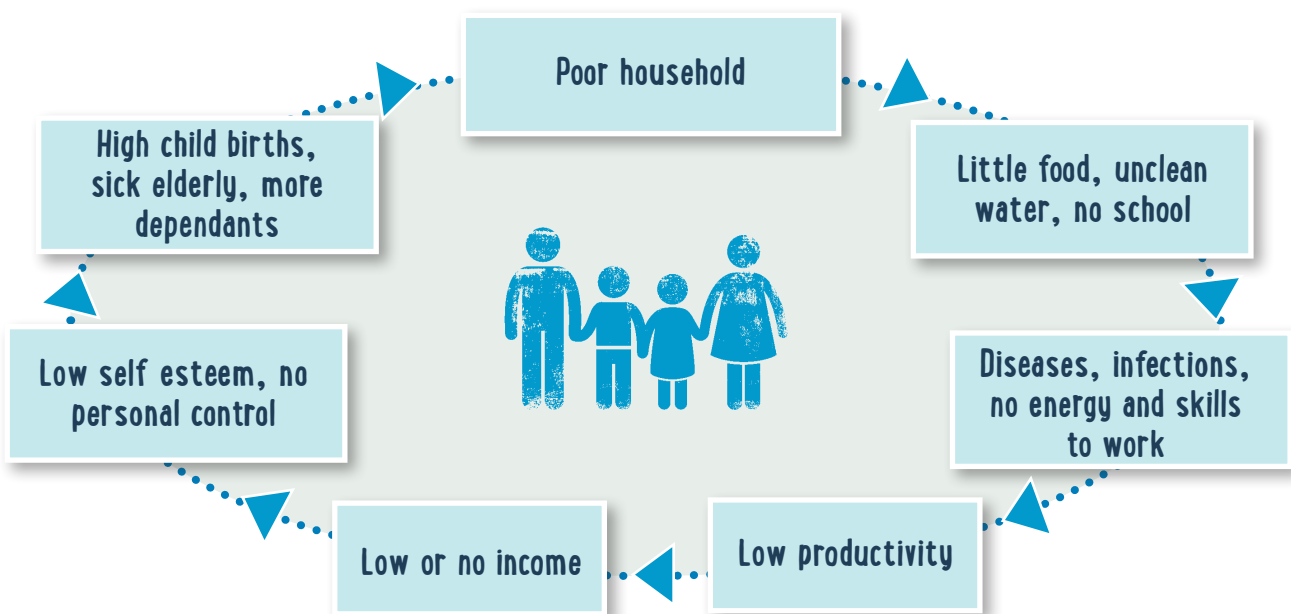
<https://www.watercare.co.nz/Help-and-advice/Environment-and-community/Watercare-Education-Programme/World-Water-Day>.

The facts

The water crisis affects the poorest most – from slums to remote rural communities, refugee camps and disaster-prone communities. As a result, the poorest live and die in conditions unthinkable to us in the developed world, unseen and unheard.

The lack of water is an often insurmountable obstacle to helping oneself. You can't grow food, you can't build housing, you can't stay healthy, you can't stay in school and you can't keep working.

Let's look at this scenario below with a family in absolute poverty.



Without clean water, the possibility of breaking out of the cycle of poverty is incredibly slim. For women and children especially, this crisis is real. It effects every minute of the day.

The facts



Water supply

Water is essential to life, yet 844 million people in the world – one in nine – lack access to it.

With unclean water sources often miles from villages, many of the able-bodied members of a community are forced to spend hours each day simply finding and transporting water. The typical container used for water collection in Africa, the jerry can, weighs over 18 kilograms (two buckets full) when it's completely full.

Imagine how demanding it would be to carry the equivalent of a five-year-old child for three hours out of each day. And, some women carry even more, up to 30 kilograms in a barrel carried on their back. That's like carrying a baby hippo.



The United Nations estimates that Sub-Saharan Africa alone loses 40 billion hours per year collecting water; that's the same as a whole year's worth of labour by France's entire workforce! This is incredibly valuable time.

With much of one's day already consumed by meeting basic needs, there isn't time for much else. The hours lost to gathering water are often the difference between time to do a trade and earn a living and not. Just think of all the things you would miss if you had to take three hours out of each day to get water.

When a water solution is put into place, sustainable agriculture is possible. Children get back to school instead of collecting dirty water all day, or being sick from waterborne illnesses. Parents find more time to care for their families, expand minimal farming to sustainable levels, and even run small businesses.

The social and economic effects caused by a lack of clean water are often the highest priorities of African communities when they speak of their own development.



Did you know?

One out of every three people is affected by water scarcity. Water researchers believe that the problem is getting worse with urbanisation, population growth, industrialisation and competitive commercial activities.

Almost one fifth of the world's population (about 1.2 billion people) live in areas where the water is physically scarce. One quarter of the global population also live in developing countries that face water shortages due to a lack of infrastructure to fetch water from rivers and aquifers. (WHO/Water Scarcity/Fact 3)

The facts



Lack of basic sanitation

Like water, toilets are critical. Toilets prevent the spread of disease and provide health, privacy and safety. Today one in three people don't have access to a toilet so they spend hours a day searching for a place to go.



Did you know?

More people have a mobile phone than a toilet!

Around 2.3 billion people lack access to basic sanitation such as latrines and toilets and as a result around 842,000 people in low and middle income countries die each year.

Diarrhoea remains a major killer but is largely preventable. Better water, sanitation and hygiene could stop the deaths of 361,000 children aged under five years each year.

Without a toilet or latrine men, women and children are left to toilet out in the open. This is known as 'open defecation' and it allows a vicious cycle of disease and poverty to continue.

If women walk to remote locations to toilet privately then they can be attacked. These places are also unhygienic and can lead to disease. In the absence of a toilet women will often wait until dark to go to the toilet. That is why women and girls often drink less during the day. Not drinking enough water each day can lead to all kinds of health problems including infections.

Could you imagine not drinking anything all day however hot and thirsty you are?



Activity

When you don't have enough water in your body you are dehydrated – [Google dehydration symptoms and see how being dehydrated would make you feel. Imagine feeling like that all day, every day.](#)

In an attempt to go to the toilet less, people may even try to change their diets by not eating foods with fibre in them such as beans, peas and lentils or leafy green vegetables which will slow down the rate of digestion. An unbalanced diet may result in long-term health problems. (See the hunger and nutrition section)

The facts



Education

Education is critical for breaking the cycle of poverty and yet over half of the world's schools lack access to safe water and sanitation facilities.

Lack of clean water has serious effects on students' academic performance and attendance rates. Each year 443 million school days are lost from water-related illness. Lack of safe water can cause even the best students to lose momentum as they deal with diarrhoea and stomach pains from disease and hunger.

Students miss class to fetch water, or to care for sick parents or siblings. In many places HIV/AIDS has already caused a large percentage of children to become orphans, requiring students to drop out and find work to provide food and care for younger siblings. If teachers are sick, classes get cancelled for all students.

Schools cannot run programmes if they cannot provide water to students, teachers and their families.



Lack of water = lack of equality

For girls, the situation is especially troublesome. It is typically the responsibility of the women to fetch water thus limiting their access to both education and business opportunities. Think about it: every day, women and young girls carry more than 18 kilograms of dirty water from sources over four miles away from their homes. This leaves little time for education which is critical to changing the long-term prospects of developing nations.

With the many additional burdens that a lack of clean water brings, education simply becomes less of a priority. This sets up an unfortunate cycle of poverty and inequality as without a proper education, there is little chance of improving one's situation later in life.

In many parts of the world the toilet facilities are not very good. There may be nowhere to wash your hands, no separate rooms for boys and girls and no toilet paper. This means in some countries girls drop out of school once they reach puberty.

Having separate boys'/girls' mens'/ladies' toilets is very important. More girls will attend school if they have their own toilet facilities. If the girls are educated they can get better jobs to look after their own families and they can learn how to keep their children healthy and well.



Activity

Class discussion – How would you feel if the boys and girls had to use the same toilets and there was no toilet paper and nowhere to wash your hands? Do you think you would be as healthy as you are now? How might you get sick?

The facts

Hunger and nutrition



It is very easy to think that people who are hungry in these countries are just lazy and hunger is the only result they deserve. That is not the case. It is just difficult for individuals to help themselves, especially if they are caught up in the usual conflicts, extreme climates, political or economic difficulties involved.

Relieving hunger in Africa has to begin with access to clean water. It may seem simple, but we forget that without access to a reliable source of water, food is hard to grow and even more difficult to preserve and prepare.

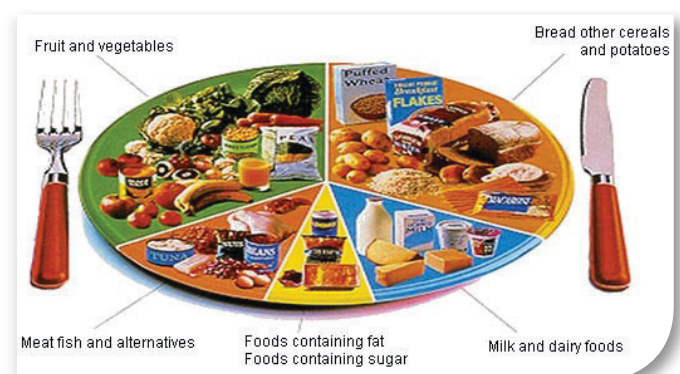
Hunger is that painful sensation or exhausted condition that one feels from want of food. In relation to countries, it is also the scarcity of food, either for a short period (a year) or consistently for many years.

If a village's farms are wiped out by a flood and result in no food for a couple of months, the people of that village will be hungry. We can say hunger will set in. But in a way, it is different from a country suffering from the effects of many years of complex political, economic and climatic adversities. People in such a country have extreme food shortages year after year with no end in sight. That too is hunger.

Hunger, therefore, is the situation, surrounded by food insecurity, and results in malnourishment. The emphasis on food insecurity is important because people suffering from hunger are constantly wondering where and when their next food will come from. Malnourishment is also important because hunger makes people eat anything to fill their tummy, with no regard to what they get from the meal. This means they can lack the essential nutrients the body needs to function properly.

Hunger gets more complex and worse when more and more communities are affected in close proximity. It looks slightly more hopeful when a starving village, town or country is surrounded by others with abundance, than if they are with other starving settlements.

Not all food is balanced food. It is important that we eat foods that have all the necessary nutrients for a balanced development. Balanced foods must, therefore, contain energy, which the body needs to work with. It must also contain proteins, which are also needed for muscle development and maintenance. It is also crucial to have vitamins and minerals that help the body to heal and fight off infections and diseases.



The facts

So, malnutrition (or under nutrition) is when the body lacks some or all of the nutrients needed to function properly. In fact, we have two basic types of malnutrition.

- The first and most crucial is called Protein Energy Malnutrition (PEM). This, as the name suggests, is the lack of glucose and proteins in foods. This is a more dangerous type and it is typical in almost all areas of hunger in the world. It is more lethal because every body part and senses need chemical energy to work. This energy comes from the calories we take in, in the form of carbohydrates and starch.
- The second type is called Micronutrient (vitamin and mineral) deficiency. Unlike Protein Energy Malnutrition, the body can survive longer with this deficiency. This type is also called Hidden Hunger, but it can cause brain damage and delayed development (where the brain and/or body has not developed as fast as it should).

A very poor family with children have very little to eat, and have no access to health facilities. As a result, the children are malnourished and unhealthy and have many health complications including stunting, where they do not develop physically and mentally as they should. They are therefore unable to go to school (even if there is a school in the next village). They grow up with no education or skills and cannot do any economic activity. Their parents die from preventable diseases as a result of the lack of health facilities, and their fate is in their hands. As the children turn into adults, they find partners who are just on the same level of poverty as them, and they have their own children. They hand over this condition of stunting to their children, who will also grow up in similar conditions.



WHO(World Health Organisation) and FAO(Food and Agriculture Organisation) recommend a minimum daily intake of 400 grams of fruits and vegetables (excluding potatoes and other starchy tubers); levels lower than this are thought to increase the risk of chronic diseases.

Sadly, many places with malnutrition also have poor water supply and waste disposal and tend to be in disease-prone areas. Malnourished children, therefore, easily fall victim to infections and viruses, as their bodies cannot fight infections.

Women and children suffer the most from malnutrition. Malnourished mothers and expecting mothers often give birth to underweight babies.

Children also remain stunted and grow up to pass on the condition to their children if their food conditions are not improved. Poor nutrition plays a role in at least half of the 10.9 million child deaths each year.

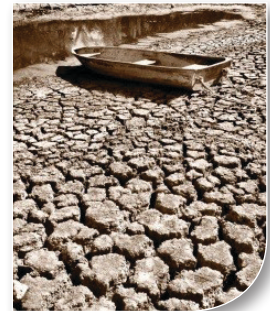
Experts confirm that humans produce more than enough food to feed every mouth on Earth (about seven billion of us). So how is hunger possible?

The facts



Extreme weather and climate change

Floods, storms, rain, droughts, heat and other extreme weather can cause communities a lot of destruction and wipe away farms. Some of these communities never recover fully and begin to face many years of hardship.



Drought is now the single most common cause of food shortages in the world. In 2011, recurrent drought caused crop failures and heavy livestock losses in parts of Ethiopia, Somalia, and Kenya.



Did you know?

In October 2013, a huge typhoon wiped out an entire town in the Philippines called Tacloban. Over 5000 people died and everything was destroyed. In a scenario like that it can take many years for the local people to recover, especially if the bordering towns and countries are not secure themselves to provide support.

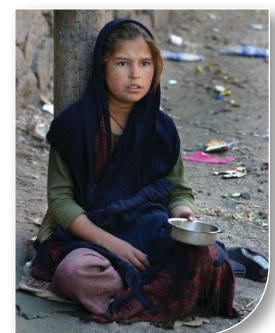
— *World Food Programme*

War and conflicts

Conflicts, civil wars, and tension among tribes, religious and political factions often cause people to abandon their homes and jobs out of fear. People often find themselves cut off from the rest of the world because they are trying to flee. In some conflicts, fighters may also seize and control farms, sources of food and water in an attempt to get people to comply with their terms. Sometimes water bodies are polluted and water wells are poisoned as punishment for communities that they perceive to be enemies. Young men and even children who do some economic activities are forced into fighting and the result is a massive drop in food production and economic growth. Sometimes food aid is seized and directed to fighters and their families, leaving the really needy people to suffer. – *World Food Programme*

Poverty

Poor families and farmers often lack the funds to acquire high yield seeds, equipment, and the infrastructure to produce more. They are forced to produce just what their physical strength will allow, just to have a little to live on. They usually use a lot of family labour and children end up working on the farms, instead of going to school. As these children turn into adults their lack of knowledge will mean that they repeat exactly what their parents were doing, barely growing enough to survive, and the poverty cycle continues.

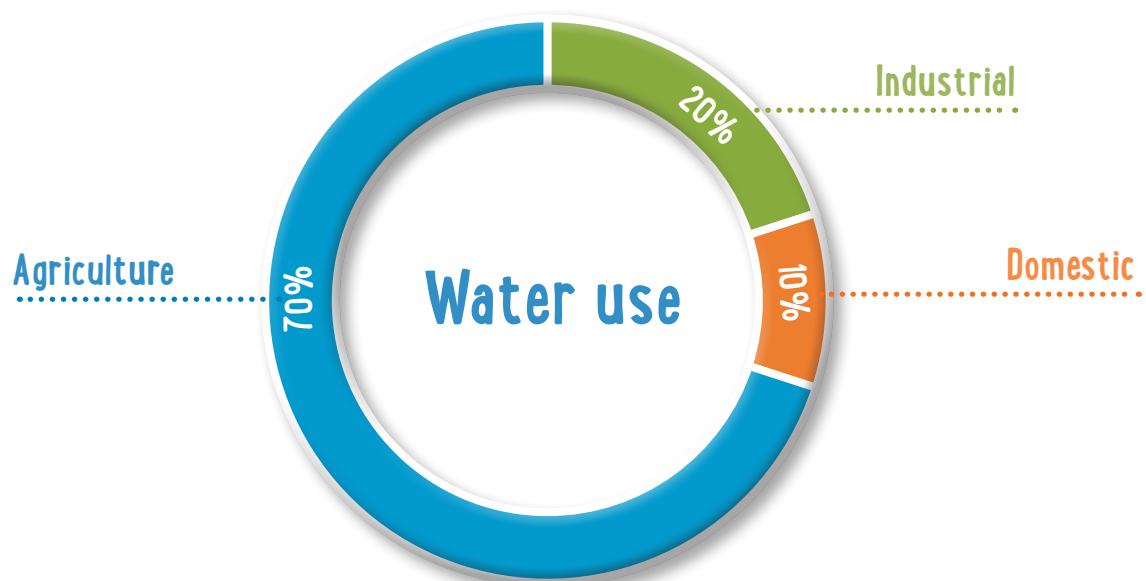


The facts

What are the effects of hunger?

Hunger and poverty go hand in hand and we have already seen how they affect health and education, but hunger also affects migration and the economy.

- **Migration**
Young adults who are able to migrate to nearby towns and cities end up in slums or run-down communities, as they cannot afford the high living standards in the cities. Their low education level also makes them unsuitable for many good, paying city jobs. Many of them end up doing drugs, robbery, and other crimes to make a living.
- **Economy**
Countries with lots of hunger tend to do poorly with the economy. This is because adults and young adults do not have the right frame of mind to work. They are constantly ill and work input and interest are very low. Fewer hands on farms also mean that there is not enough produce going from the farming villages into the towns for consumption and further export. People live from hand to mouth with little to invest in the wider economy. Additionally, governments are forced to spend more on food aid and care, rather than investing in schools, infrastructure, and healthcare.



It takes huge amounts of water to grow food. Just think, globally we use 70 per cent of our water sources for agriculture and irrigation, and only 10 per cent on domestic uses.

Water is fundamental to relieving hunger in the developing world. Eighty-four per cent of people who don't have access to uncontaminated water, also live in rural areas, where they live principally through subsistence agriculture. Inadequate water supplies mean farming and other crops that need water to grow have lower yield. It means farm animals will die and others will not do well without water. The result is constant hunger and thirst and low quality of life.

The facts



Did you know?

Agriculture is by far the biggest user of water, accounting for almost 70 per cent of all withdrawals, and up to 95 per cent in developing countries.

1. The water needed for crops amounts to 1000 to 3000 cubic metres per tonne of cereal harvested. Put another way, it takes one to three tonnes of water to grow one kilogram of cereal.
2. The daily drinking-water requirements per person are two to four litres. However, it takes 2000 to 5000 litres of water to produce a person's daily food.
3. In many poor and rural communities, people use wastewater to water their crops and farms because there is water shortage or scarcity. It is believed that 10 per cent of all the foods we eat come from crops cultivated by wastewater. These can contain chemicals or disease-causing organisms.
4. Between now and 2030, the world's population is expected to grow by two billion people. Feeding this growing population and reducing hunger will only be possible if agricultural yields can be increased significantly and sustainably.
5. With so much of the Earth's water being used for agriculture, it is clear that an improvement in the management of agricultural water becomes key to achieving global food security.



Illness and disease

Clean and safe water is essential to healthy living.

Tiny worms and bacteria live in water naturally. Most of the bacteria are pretty harmless. But some of them can cause devastating disease in humans. And since they can't be seen, they can't be avoided. Around 40 per cent of the world's school-age children have worm infections that can lead to developmental problems and can affect their knowledge and understanding. Around another 5000 children die every day from diseases because of a lack of safe drinking water, inadequate sanitation and poor hygiene. Water-related diseases include diarrhoea, schistosomiasis, filariasis, trachoma and helminthes.



Activity

Google each of these words and find out about the diseases – diarrhoea, filariasis, trachoma and helminthes.

The facts

An improved water supply where the water is disinfected at the place where it is used can cut the number of people suffering from diarrhoea by almost half and handwashing can reduce the number of people getting diarrhoea by more than a third.

Lack of water or quality water causes huge sanitation issues. Clinics, local restaurants, public places of convenience and many other places are forced to use very little water for cleaning. This compromises the health of the staff and people who use the facilities.

Every glass of dirty water is a potential killer.

Most of these waterborne diseases aren't found in developed countries because of the sophisticated water systems that filter and chlorinate water to eliminate all disease-carrying organisms. But typhoid fever, cholera and many other diseases still run rampant in the developing parts of the world.

For how Auckland's water is treated click on the following link:

<https://www.watercare.co.nz/Water-and-wastewater/Water-treatment-and-supply>



Did you know?

Half of the world's hospital beds are filled with people suffering from a water-related disease.

In developing countries, about 80 per cent of illnesses are linked to poor water and sanitation conditions.

One out of every five deaths under the age of five worldwide is due to a water-related disease.



Water and young children

Infants and young children are especially susceptible to diseases because their immune systems are experiencing everything for the first time. Even in developed countries, lots of mothers boil water before giving it to their children – just to be doubly safe. In poor countries, the fuel for the fire can be so expensive that mothers can't afford to boil water and cook food.

- Poor health leads to poor productivity.
- Water unlocks potential by helping kids stay healthy so they can stay in school.

The facts

The sickness caused by dirty water saps people's energy to do much of anything. If you've ever had food poisoning, you know how horrible it can be. Students who suffer from waterborne illness can't stay in class. They miss out on the chance to learn and the cycle of poverty continues. That and when one person is sick, someone else has to take care of them, which means that the second person can't work either. If the sick person needs money to pay for medicine, that money can't be used for other things, like food or school supplies.

Rural dwellers and the urban poor feel the lack of safe water and proper sanitation in the developing world the most. With few medical resources at their disposal, the poor are particularly vulnerable to chronic illnesses that hinder their productivity, making the escape from poverty even more difficult.

Acknowledgment:

www.thewaterproject.org website for providing the factual information for this pack.

Challenges and solutions



Just building facilities without consulting local people and getting their interest and investment in it can result in facilities being broken, misused and abandoned.

We need to identify the individuals and communities that want improvements and give them incentives for looking after the assets.



The water and sanitation projects need to be monitored and evaluated taking into account the need for the project, the design, use, impact and efficiency. Results need to be used by decision makers and incorporated into new policies. So lessons can be learnt as to what works and what doesn't.



There needs to be an emphasis on sustainability – technical, financial and environmental sustainability. Technical sustainability has to be ongoing. Too often a pump or other piece of equipment breaks and cannot be repaired. Financial sustainability relies on the true cost of the sanitation and water system being recoverable locally without relying on

long-term financial aid from external donors. However this can cause tension when safe water and sanitation are seen as basic human rights that should be provided to all. Environmental sustainability takes into account the available water resources for drinking water as well as for agriculture and industry and also the feasibility of wastewater treatment. In developing countries most cities have sewage systems that do not treat sewage but put it untreated into the water system. The effect on the environment is serious and can cause irreversible damage to the aquatic environment as well as health risks to people from exposure to pathogens in the environment.

What can you do?

You're not alone if you had never fully contemplated how a lack of water keeps people in poverty. The world is only beginning to take a close look at the root causes of extreme poverty. Almost two in three people lacking access to clean water survive on less than two dollars a day. One in three lives on less than one dollar a day. Their world and their challenges are foreign to us. Dripping taps in rich countries lose more water than is available to the poorest billion people on Earth. It's no surprise we've never put ourselves in their shoes and fully understood how water scarcity perpetuates this cruel cycle of poverty.

What is your role in water preservation?

Sometimes the magnitude of a problem can make one feel that there is nothing that can be done. But there is a lot you can do for water. There is a high chance that people reading this do not live in water-deprived areas, and may think it is not their problem. Here is what you can do to help.

Awareness

Learn about the water crisis, just like you are doing. If you understand a problem, you are in a better position to have a solution. Talk about it with family and friends. Look out for news and facts on water shortages and crisis areas.

Take part

Be part of competitions, organisations and societies that aim to preserve and defend natural resources including water. Speak to your parents about donating or helping out charity groups to provide water and sanitation in the neediest places.

Hold fundraising days in your school on World Water Day – March 22

And, World Toilet Day – November 19

And, donate the money to your chosen project.

At Watercare we decided not to each have a secret Santa gift. Instead our team put the money together and bought clean water for a school.

<https://oxfamunwrapped.org.nz/gift-cards/?sort=featured&page=2>



What can you do?

<https://www.worldvision.org.nz/give-now/smiles-gift/>

This site gives you the opportunity to gift clean water to a child or a community or even a school toilet among lots of other things.



Watercare also has a group of people working with Orange Sky <https://orangesky.org.nz> which is a charity that provides mobile showers and laundry facilities to the homeless in Auckland. We collected toiletries before Christmas and donated them to the charity for the homeless to use while making use of the Orange Sky facilities.



Soap Aid is a not-for-profit organisation committed to saving children's lives through improved hygiene while positively impacting the environment. <https://soapaid.org>

In partnership with the hotel industry, Soap Aid reprocesses and delivers recycled hotel soap to disadvantaged communities in Australia and overseas.



It works closely with local communities to provide vital hygiene education on the importance of handwashing with soap.

Its aim is to achieve lifesaving and sustainable improvements in global hygiene practices.

Other water charities

<https://thewaterproject.org/>

The Water Project is a charity that provides access to clean, safe and reliable water and sanitation solutions across sub-Saharan Africa, one village at a time.



<https://www.charitywater.org/>

Charitywater is a non-profit organisation bringing clean and safe drinking water to people in developing countries



<https://water.org/>

Water.org is a non-profit organisation co-founded by Matt Damon and Gary White that provides access to safe water and sanitation in developing countries.



<https://www.threeavocados.org/>

Three Avocados is a non-profit coffee company. One hundred per cent of their net proceeds provide clean drinking water throughout the world. The coffee is grown in Uganda and Nicaragua by small farmers who are paid fair prices for the high quality coffee they produce.



Use water wisely

<https://www.watercare.co.nz/Help-and-advice/Be-Waterwise>

Never assume that your society is too advanced to experience water shortages. If we do not acquire the right attitude towards water, it is only a matter of time and one day there will be a shortage. Keep the tap off when not in use. Minimise the flushing of toilets and bath times. Fix leaks at home, a leaking tap can waste more than 11,000 litres of water per year. Ask your plumber to install water-saving devices, toilets and shower heads in your home when they need replacing. In effect, anything that you can do to save water, do it.

Never flush toxic chemicals such as paints, chemicals or medication down the toilet. It can harm the bacteria that help to clean up wastewater in the wastewater treatment plant and can cause health problems in marine life.

Help to keep your environment clean

Join groups that stop individuals, industries and governments from doing things that pollute and degrade the environment.

<https://seekvolunteer.co.nz/environment-conservation-volunteering>

This site lists volunteer opportunities around New Zealand.

Other water charities

<https://www.aucklandcouncil.govt.nz/environment/what-you-can-do-for-environment/Pages/join-a-community-programme.aspx>

Community programmes run by Auckland Council.

<https://www.watercare.co.nz/Help-and-advice/Environment-and-community/Watercare-Harbour-Clean-Up-Trust>

This charitable trust sponsored by Watercare removes litter from Auckland's harbours and inner gulf islands. Volunteers can help with the cleanup.

Interactive activities

Interactive games to learn more about water and sanitation:

How water works

This interactive water treatment plant shows where water comes from, how it is cleaned and how it gets to our homes. Good reading skills are required.

<http://www.twdb.texas.gov/conservation/education/kids/InteractiveModules/media/water-system-tap-back-1.swf>

The “Journey of a raindrop” programme follows the path of a raindrop from a house to a river, engaging users in cleaning up the sources of non-point-source pollution around their home.

<http://www.grandcanyonadventurefilm.com/interactive-activities/journey-of-a-rain-drop/index.html>

Pipeline challenge

Connect the water reservoir to the houses using the pipes and make sure you replace the leaking pipes as you go. Do all this against the clock.

<http://www.scottishwater.co.uk/clearer-fresher-learning/games/about-our-games>

Pumping station

How long can you maintain the right amount of water to keep everybody supplied all day?

<http://www.scottishwater.co.uk/clearer-fresher-learning/games/about-our-games>

Learn about water conservation. This programme demonstrates how much water is used in the average day and provides ways of using water wisely around the home.

<http://www.grandcanyonadventurefilm.com/interactive-activities/water-conservation/index.html>

Water Quest

Have you ever imagined how you would cope if you didn't have clean water at home? How would you wash and what would you drink? What would you do if there were no toilets available?

Ambohimahatsinjo is a rural village in the highlands of Madagascar. People there are a hard working tight-knit community but they face many hardships because they don't have clean water or toilets in the village. In this game you will explore the village and surrounding area, talk to three key villagers and help WaterAid decide what solutions to implement.

<http://www.wateraidgames.org/waterquest/>

Water walk – water aid

<https://www.youtube.com/watch?v=4V-KoJGGJ4s>

Walk to school

<https://www.youtube.com/watch?v=5bWVAEU6SQc>

Cheru's journey –

<https://www.youtube.com/watch?v=1g7n42Dvw-l>

Background to Cheru's story

<https://www.worldvision.org/clean-water-news-stories/compare-walk-for-water-cheru-kamama>

The water rich versus the water poor

<https://www.youtube.com/watch?v=sXKnMZwxYA8>

Marie's story – World Vision US

<https://www.youtube.com/watch?v=XQ2rce815QY>

Interactive activities continued

The bottom line – understanding the business of sanitation

In the fictional African city of Bafini, 80 per cent of residents have no access to a sewer connection, relying instead on toilets with pits or septic tanks. This creates a need for better faecal waste collection services, and a market opportunity for a smart entrepreneur. You run a waste management business in Bafini and have just decided to expand into faecal sludge management. You have a positive cash flow which you will need to maintain. Your business must impact positively on low levels of public health in Bafini and work to get a sceptical city government onside. You cannot operate without their support. Can you make a success of it?

How the game works

Answer each question and try and keep your business going through the four levels. If any of your three scores reach zero, you lose!

<https://www.wsup.com/the-bottom-line/>

Robopoop game

The sewage pipes have all been blocked because people have been flushing nappies, cotton buds, disposable razors and baby wipes down their loos. You have to steer the robot down the pipe to the sewage works, blasting away all blockages and debris and clearing the sewage pipes of all these bad items!

<http://www2.scottishwater.co.uk/robopoop/game.htm>

Clean it up! Can you clean up the wastewater?

This game is really fun, easy to play and educational – your challenge is to clean up the waste water. With the aid of retro computer games, you will discover the different treatment stages at a waste water treatment works, and you will help out at two of the key stages of a waste water treatment works.

<http://www.scottishwater.co.uk/clearer-fresher-learning/games/about-our-games>

Angry Turds is a game created to highlight that fact that one in three people around the world have nowhere safe or private to go to the toilet. Angry turds is a fun way to get talking about why poo needs to go into toilets to keep the environment clean and communities happy and healthy.

You can also build your own game starting with designing your own turds. Then create your own level with a choice of toilets, obstacles and props.

<http://www.wateraidgames.org/angryturds>

Washing your hands properly is important wherever you live

Video <https://www.youtube.com/watch?v=gHV6WC-TEwY>

Teaching children how to improve health, hygiene and sanitation in schools.

N.B. this video talks about periods and disposal of sanitary towels – teachers are advised to view it before showing to pupils.

Handwashing lessons and cross curricular ideas linked to handwashing.

https://www.teachingideas.co.uk/sites/default/files/handwashingcurriculum_0.pdf

Have you washed your hands poster

<https://www.teachingideas.co.uk/sites/default/files/haveyouwashedyourhands.pdf>

Handwashing placemat. More for food safety than washing hands after going to the toilet.

<http://www.fightbac.org/wp-content/uploads/2016/10/HandWashing-Placemat.pdf>

More water activities for the classroom

We have some great ideas for water activities that we can send you. We don't have them available for download as they must only be used for educational purposes by teachers in the classroom.

To request these activities, please email Sally Smith at Sally.Smith@water.co.nz

Activities/lessons include:

- Exploring soil erosion in New Zealand
- Why do people dam water?
- Does surface area affect evaporation?
- How to make a bottle garden
- Algae and water pollution
- Make your own water cycle
- Water careers
- Invent a fish
- Other ideas to celebrate World Water Day

WEAR BLUE DAY

in celebration of

World Water Day 22 March 2019

Please wear blue clothes to school
on this day

Get your

WEAR BLUE BADGE

from your teacher for a

\$

donation

towards





