



Big ideas from the smallest room



**Toilet Talks factsheet series** 

# Climate and water





## Climate change and failing water and sanitation systems

- Water not carbon dioxide is the most abundant greenhouse gas.
- While we have too much water moving too fast in the atmosphere, we don't have enough water coming out of pipes.
- A lack of water and sanitation services makes people vulnerable to the next extreme natural disaster. This deficit literally affects half the people on the planet!
- Around the world, 2.1 billion people lack access to safely managed water. That means 3 in 10 people in the world don't have H2O that is free from fecal matter and chemical contamination.
- 4.4 billion people globally don't have safely managed sanitation. In other words, 6 in 10 people don't have access to toilet facilities that safely remove and dispose of excretion, away from human contact. Yes, that's right more than half the people in the world don't have a properly functioning toilet.
- 2.3 billion people globally, or 3 out of 10, lack proper handwashing facilities - soap and water - in their home. Not washing your hands can help you catch and transmit everything from influenza and colds to meningitis and COVID-19.

### Climate change & water: what you should know

- While man-made emissions are driving global warming, water is an important part of the story.
- The feedback loop in the atmosphere, where warm air holds more water vapor, promotes more warming as a greenhouse gas and makes the heating and carbon dioxide-induced problems worse.
- Climate change is about water. The impacts of climate change are impacting the regularity and inequitable distribution of our water sources.

  Yet, the Paris Agreement never once mentioned water.
- 4 Strong water and sanitation systems that can hold up to the ravages of climate change are crucial for protecting our water from contamination and reducing the spread of disease.

#### It's time for action!

As climate change escalates, we really need to worry more about water. Rapid urban growth, larger agricultural irrigation demands, droughts, pollution and greater burden due to overall population increase means we need to protect and

manage one of the planet's most precious resources, on which every human relies for survival. And we really need to worry about the poorest and the most vulnerable as it is they who pay the highest price.

## A climate crisis is a water crisis

World leaders are talking about climate change, which is a start. But while we work on reducing carbon emissions, we can't forget about water. A warmer atmosphere holds more water vapor which leads to further warming, intensifying the problem and bringing even wilder weather and more unlivable conditions.

#### Too much, too little, too dirty

There are three major problems we will face due to climate change with water: we'll have it too much, too little or it will be dirty. Some countries will suffer floods due to higher tides and storm surges. Other nations will endure lack of water due to droughts, increased agricultural demands and a growing population. Some countries will have more polluted water because of flooding, poor drainage, artificial fertilizers or soil erosion.

#### Water gets on the global stage

For the very first time in 2021, water had an official platform in the international climate discussions at COP26, highlighting the fact that effective action against climate change is also rooted in water-related solutions. But as the numbers show, we still have a long way to go.

#### Inadequate standards

The current state of water and sanitation standards in many developing countries is poor and the systems are very weak. As climate change grows more severe, rising tides, flooding and high winds will lead to serious problems like collapsed latrines and sewage overflows. There needs to be stronger infrastructure in place that is durable and well-built and is protected from natural disasters such as flooding and extreme winds. All cities, towns and villages should have WASH systems that are adaptable to unexpected weather patterns, so that water sources are protected to prevent contamination.

#### Sustainability today for a better tomorrow

Changes in quantity and quality of water around the world aren't our only problems. We really need to ensure that we manage

water systems in a sustainable way. We want to guarantee that all people in the world have access to efficient services today that will continue to function tomorrow.

#### Public health concerns

It's impossible to preserve the health of a community without having safely managed toilet systems. That means that households, community buildings and healthcare facilities should all have toilet systems that safely extract and discard of human waste so it avoids human contact and can't pollute local water sources. But when links in the sanitation chain inevitably break, it's important to have a strong system in place so that problems can be quickly and effectively addressed, and services can be restored as soon as possible. This is especially important when natural disasters



strike. And with climate change, we can expect more of these to occur.

Weak sanitation systems and lack of clean water can lead to the spread of infectious diseases. Every household in the world should be prepared and have soap and

#### "We really need to ensure that we manage water systems in a sustainable way"

water available for frequent handwashing, which is crucial for the prevention maintaining health in communities. In places with poor WASH standards, people defecate without washing their hands afterward and later use these same unhygienic hands to prepare food. This is the way many diseases easily spread. Correct hand hygiene dramatically lowers this risk.

#### Adapting to a changing planet

Climate change will affect all regions of the world in different ways. We need better policies, capacities and trained people to create and maintain effective and reliable water and sanitation services – to maintain the health and well-being of their people today and tomorrow.

We'll only solve the biggest problems facing our world today if we recognise how interconnected they are – and to learn and connect more, and in a variety of ways. Toilet Talks factsheets focuses on these interconnected issues. Let's solve the big issues of today.

Connect with us and other like-minded changemakers.

→ www.toilettalks.org

→ #CommittoConnect

© 2021, IRC. Cunningham, J., 2021. Climate change and failing water and sanitation systems. Toilet Talks factsheet series: Climate and water. The Hague, IRC. Photos: cover [Samara Doole, Nathan Dumlao, Casey-Horner], Unsplash; All other photos by IRC.

