



Saturday 13th April - 14th April 2019

WATER AND SANITATION HACKATHON CHALLENGE 2019

Tackling one of the 17 sustainable development goals of 2030:

Clean Water and Sanitation

Background

Access to water, sanitation and hygiene is a human right, yet billions are still faced with daily challenges accessing even the most basic of services. Around 1.8 billion people globally use a source of drinking water that is fecally contaminated, and roughly 2.4 billion people lack access to basic sanitation services, such as toilets or latrines. By 2050, at least one in four people is likely to live in a country affected by chronic or recurring shortages of fresh water.

Problem

1. Water Scarcity

Only 3% of the world's water is fresh water, and two-thirds of that is tucked away in frozen glaciers or otherwise unavailable for our use. As a result, some 1.1 billion people worldwide lack access to water, and a total of 2.7 billion find water scarce for at least one month of the year. At the current consumption rate, this situation will only get worse.

2. Water Quality

Up to 80% of illnesses in the developing world are linked to water hygiene and sanitation. Water stress and lack of sanitation disproportionately affect women and girls. These factors affect their health, safety and opportunity to engage in economic activities.

Poor quality of water increases the risk of being ill or the likelihood of catching a serious disease.

3. Hygiene and Sanitation

The lack of safe sanitation facilities and services increases the chances of debilitating diseases such as diarrhea. In Nigeria, over 60% of the rural population live more than 30 minutes away from a working water source. In Indonesia, only 5% of urban wastewater is safely treated and disposed of, and children living in communities with open defecation during the first 1,000 days of life are 11 percentage points more likely to be stunted.

Can you help to find a solution?

The Challenge:

Your challenge is to come up with a solution to help improve either all or some of the above/below:

- *Improve access to clean water for rural communities / remote regions*
- *Lack of education about the importance of safe sanitation and clean water facilities*
- *Improvement of hygiene and sanitation*

Further links for research

- <https://www.naturalcapitalpartners.com/sustainable-development-goals/goal/clean-water-and-sanitation>
- <https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-6-clean-water-and-sanitation.html>
- <https://www.worldwildlife.org/threats/water-scarcity>
- <https://www.webuildvalue.com/en/megatrends/facing-the-problem-of-water-scarcity.html>
- <https://borgenproject.org/sanitation-developing-countries/>

Teams will be judged on a certain set of criteria that will be explained on the day, but we encourage you to pick one of these problems to tackle in depth rather than try and tackle all problems.

Good luck!