



GOOD NEWS FOR THE PLANET

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for Climate Action**

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WATER, WATER EVERY WHERE

Project: Warka Water
By: Warka Water NGO
Country: Italy, Ethiopia
Discipline: Engineering
URL: warkawater.org

A lack of potable water is a huge problem for people in the third world, where water is often contaminated by waste, parasites and disease. Warka Water wants to provide rural populations with clean water by harvesting the water in the air and making it available for consumption. No matter what the temperature or humidity conditions, air always contains a certain amount of water. Warka Water, or WW for short, is a vertical structure designed to harvest water from the atmosphere. It can collect up to 100 litres every day. Constructed of bamboo, fibre ropes and bio-plastic, the 12-metre-tall tower houses a permeable mesh that captures water droplets, filters the water in a funnel, and collects it in a 3000-litre tank that rests on blocks of stone. The entire structure is made of components that are easy to transport in remote areas and easy to assemble using basic tools. The scheme takes its name from the Warka Tree, a fig-tree native to Ethiopia that provides both fruit and a shaded place of gathering for rural communities. Successive prototypes and experiments over the past five years have refined the design, and field tests are currently taking place. The team hopes to build three pilot towers in 2018.

Warka Water NGO

Warka Water team members are based in Italy, India, Lebanon, US, UK, Ethiopia, Nigeria, Korea and Haiti. The team is headed by CEO and founder Arturo Vittori, an architect and industrial designer from Bombarzo, Italy. Volunteers are currently sought in the fields of structural, material, electrical, environmental, aerodynamic and software engineering.







WARKA WATER TOWER INAUGURATION ASSEMBLY