

WarkaWater
Every drop counts



"In rural Ethiopia, women and children walk up to six hours to collect water from shallow, unprotected ponds."



ARCHITECTURE AND VISION

■ WARKAWATER

Collecting water from the sky to the ground, where people need it.

In rural Ethiopia women and children walk several hours to collect water. Most people collect water from shallow, unprotected ponds which they share with animals and are subject to contamination. 'WarkaWater' is a 9 m tall bamboo framework with a special fabric hanging inside capable to collect potable water from the air by condensation. The lightweight structure is designed with parametric computing, but can be built with local skills and materials by the village inhabitants. The tower is assembled in sections and installed from top down. The structure

can be lifted and fixed to the ground by 4 men, no scaffolding needed. The fabric can be lowered for maintenance. First prototypes have been built early this year in collaboration with the Ethiopian Institute of Architecture, Building Construction and City Development EiABC of the Addis Ababa University, and with IUAV University of Venice. 'WarkaWater' is on exhibition at Palazzo Bembo during the 13th International Architecture Biennale in Venice. The material used for the structure is the locally sourced giunco, iron wire for the connections and polyethylene textile for the fog harvesting. The current programme is to build several towers in Ethiopia early 2013 with the involvement of local people and supporters.

■ WARKA TREE



The name 'WarkaWater' comes from the Warka Tree, a giant wild fig tree native to Ethiopia, traditionally used for public gatherings and school education. The Warka Tree is an archetype of the Biennale theme 'Common Ground'.

Be a part of this transformation!



■ CHARACTERISTICS

Background: Insufficient access to potable water for people in Ethiopia
Objectives: Harvest water out of fog in mountainous regions
Concept: Tower with net, also serves as a social gathering point
Transport: 2 donkeys
Location: Ethiopia, Africa
Assembly: 3 days, 6 people
Structure: Modular lattice framework
Energy: Solar panel for illumination
Materials: Bamboo or similar local material, rope, wire, PE-fabric
Dimensions: dia 8 m, h 9 m
Weight: 40 kg

■ CREDITS

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■ SUPPORT

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Founded in 2003 by architects Arturo Vittori and Andreas Vogler, it is based in Bomarzo (Italy) and Munich (Germany). The company name 'Architecture and Vision' reflects the believe that architecture needs a vision of the future to produce a long lasting cultural contribution. This vision supports quality of life through a wise use of technologies and available resources, to create a harmonious integration of humans, technology and nature.



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