



la Biennale di Venezia

15. Mostra
Internazionale
di Architettura

REPORTING FROM THE FRONT

Biennale Architettura 2016

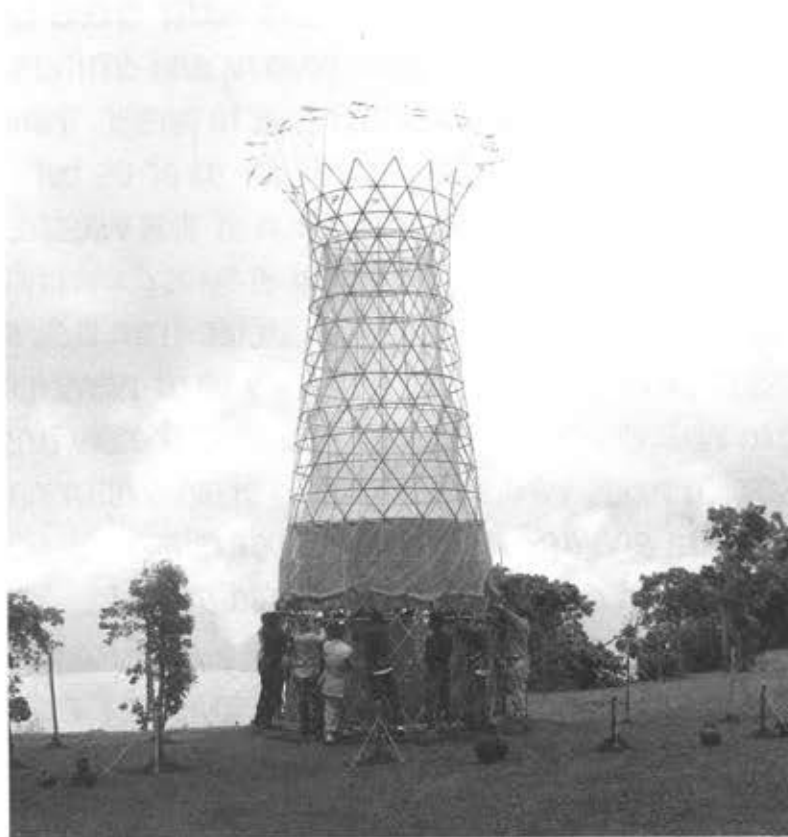
Exhibition

84.

INFRASTRUCTURE, TOTEM,
AND SOCIAL SPACE.

**THE WARKA WATER PROJECT
IN AFRICA.**

You don't have to be an expert to understand that water is going to be one of the most crucial issues of the future. Be it because of climate change, the desertification process of many regions, or simply a greater demand for water due to demographic growth, we will have to address the problem of its shortage. Warka Water is a project that tries to capture water where conventional ways—melted snow, rain, or phreatic aquifers—are not available. The project captures the moisture in the air, condensing it when it comes into contact with the linear surfaces of the tower and conducts it to a reservoir beneath to keep the water fresh. What makes this project go beyond the technical dimension of water collection is that it explores its capacity to work as a social space and a source of identity for a village. The size needed to capture a relevant amount of humidity means that the monumentality of the construction also works as a reference point; its form is a powerful, memorable element of the place. This is no different from a telecom tower, which is both a technical device and a postcard symbol for a city. In this case, the water tower is simultaneously a piece of infrastructure and an iconic element, a kind of useful totem. But in addition to this, Warka Water is thought of as a driver for social enhancement. On the one hand it uses hi-tech science to capture water efficiently; on the other hand it is a low-tech device that can be built using local materials and labor, able to trigger a sense of belonging to the place and the community.



Above: Architecture and Vision, Marks Water, Inauguration day: canopy installation, Dorze, Ethiopia, 2015.

Photo Arturo Vittori. © Architecture and Vision

Below: Architecture and Vision, Marks Water, women fetching water, Dorze, Ethiopia, 2015.

Photo Arturo Vittori. © Architecture and Vision

Water is central to life. Access to safe water should be a basic human right, but water poverty and conflicts over control of water resources continue to persist. There is enough fresh water on the planet for all of us, but it is distributed unevenly, and too much of it is wasted, polluted, and unsustainably managed. In rural communities throughout Africa, millions of people suffer from lack of access to clean and safe water. For survival, women and children walk every day for miles towards shallow and unprotected ponds, where the water is often contaminated with human and animal waste and parasites. Every 90 seconds, a child dies from water-related disease.

Warka Water is an alternative water source for rural populations that face challenges in accessing drinkable water. It is first and foremost an architecture project. A vertical structure designed to harvest potable water from the atmosphere, Warka Water collects rain and harvests fog and dew, with the objective of providing an average of 100 L of drinking water every day. Built with simple tools, and using a passive system to collect water from the atmosphere, Warka Water is designed to be owned and operated by the villagers. When a small rural community adopts Warka Water, it can lead to impactful change in a variety of areas, including the community's education, economy, society, and agriculture, as well as impacting the environment.

