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Half Full: A Personal Water Collection System

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HALF FULL

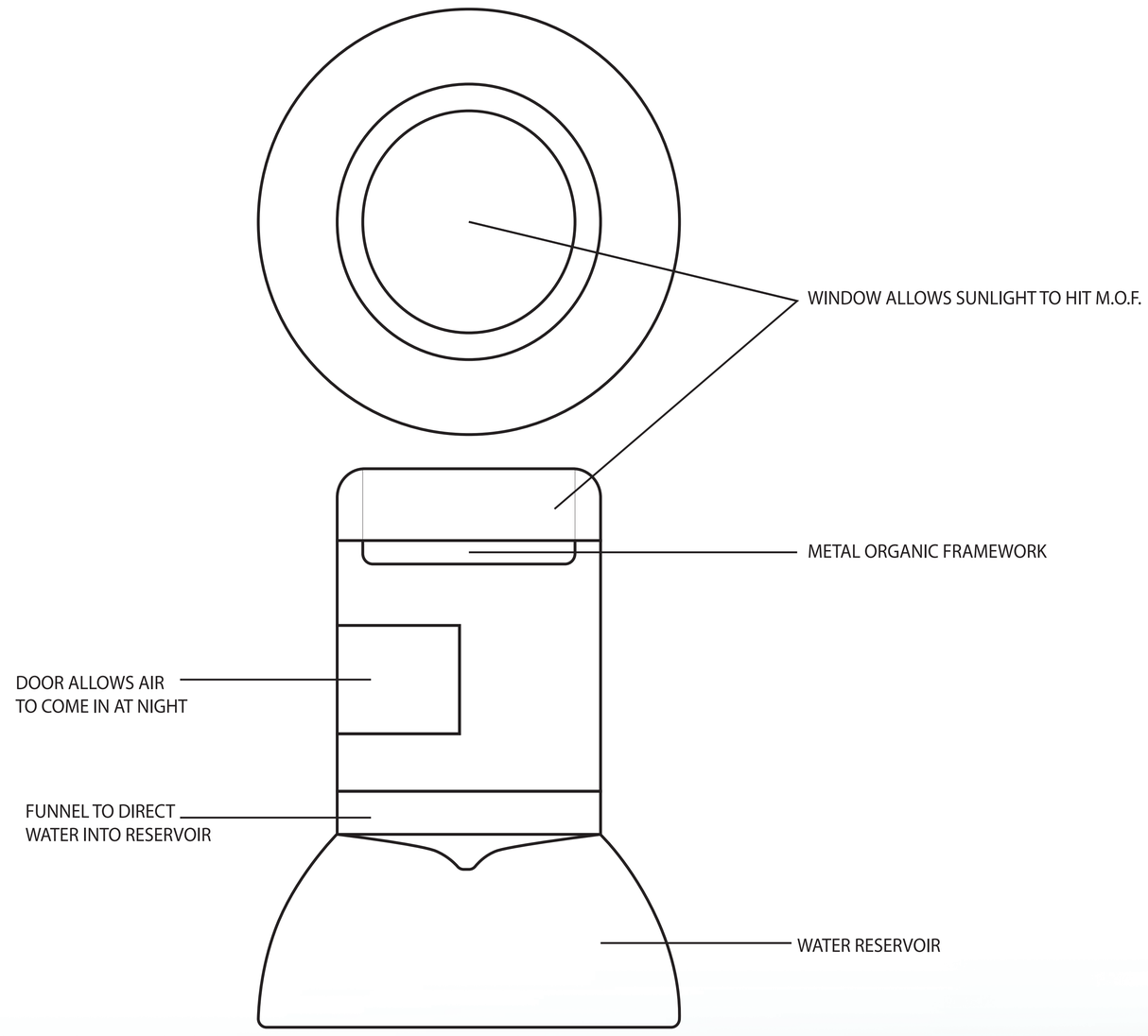
a personal water collection system.

THE PROBLEM:

There are thousands of displaced refugees in the Middle East, where water is often limited. In some camps refugees must carry gallons of water over long-distances to provide for their families. Long queues, harsh weather, and tensions over access to water are just some of the everyday struggles of a refugee.

THE SOLUTION:

Distributing small scale water-collection units to provide individual families with their own source of drinking water.



HOW DOES IT WORK?

The MOF works when it is exposed to the air overnight, and is in a closed system during the day. Sunlight heats up the MOF during the day and induces condensation in the system. The water can then be directed into a reservoir for collection.

WHAT IS THE TECHNOLOGY?

An MOF is created when metal ions bond with organic compounds in a solvent. A useable, powdery substance is left over when the solvent boils and the liquid evaporates.

“The first problem we face
is getting water...”

MATTHEW CUCCURESE. POOJA JOSHI. SAMANTHA RINGER. SOPHIA WARNE ROWE. ANDRES VALBUENA.

Photo by Muhammed Muheisen