

Providing Potable Water to Peruvian Informal Settlements



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Goal

To provide potable water to the slums of Manchay, Peru



Children in Manchay

Problem

Manchay, Peru

WATER SCARCITY

80,000
People live in Manchay

50%
Live in poverty

10L
Per Person Per Day

Distributive Injustice

Technology Analysis

🟢 = Good 🟡 = Medium 🔴 = Bad

Tech	Initial Cost (\$)	Water Production (gal/day)	Energy Usage (kW/day)	Maintenance Cost (\$)
River Filtration System	🔴	🟢	🔴	🔴
Electrostatic Membrane AWG	🟡	🟢	🟡	🟡
Solar Powered AWG	🟢	🔴	🟢	🟡
Waterseer	🟢	🟡	🟢	🟡

Atmospheric Water Generator

Solar Panels

- Eliminates the need for electricity
- Stored thermal energy can be recycled into the system



Membrane

- Reduces energy requirements
- Removes pollutants in the collected air

Underground Condenser

- Reduces energy requirements
- Uses underground temperatures to assist in the cooling and condensing process

Our Plan

STEP 1



ANALYZE

- Research the issue
- Identify solutions
- Learn culture

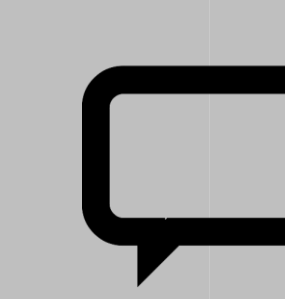
STEP 2



PITCH

- Find investor
- Discuss with church and government

STEP 3



DESIGN

- Build technology from previous research
- Test product

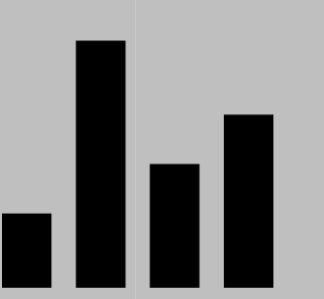
STEP 4



DISTRIBUTE

- Receive approval
- Install technology
- Give responsibility

STEP 5



MAINTAIN

- Survey technology efficiency and satisfaction
- Plan expansion

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