

Mitigate Spread of Cholera Through Soap Upscaling Technology

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What is Cholera?

- Waterborne bacterium.
- Causes rapid dehydration.
- Causes electrolyte imbalances.
- Death in up to 50% of untreated cases.

Problem

Due to a lack of water, hygiene, and sanitation a strain of El Tor hybrid cholera epidemic has risen in Haiti.

Solution

- Reduce the spread of Cholera
- Make Clean Water Available
- Turn Bar-soap into Liquid-soap
- Develop a continuous education hygiene program on soap and clean water.

P&G PUR Packets Process

- Purifies 2.5 Gallons of Water
- Chemicals bind to the pollutants and pathogens
- Sediment settles
- Water is filtered with cloth



Dirty Water



P&G Packet Settling Sediment



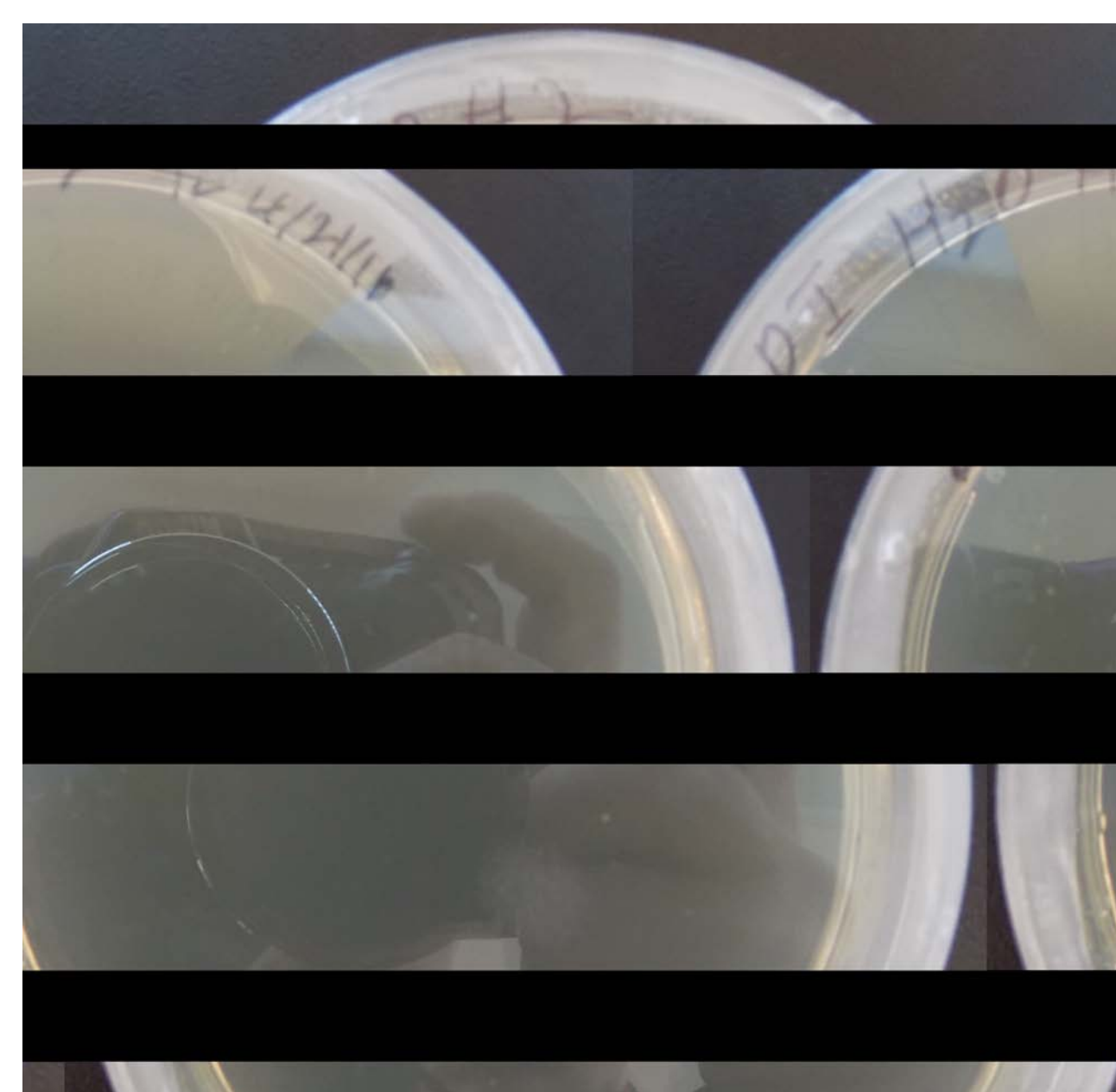
Clean Drinkable Water

Effects

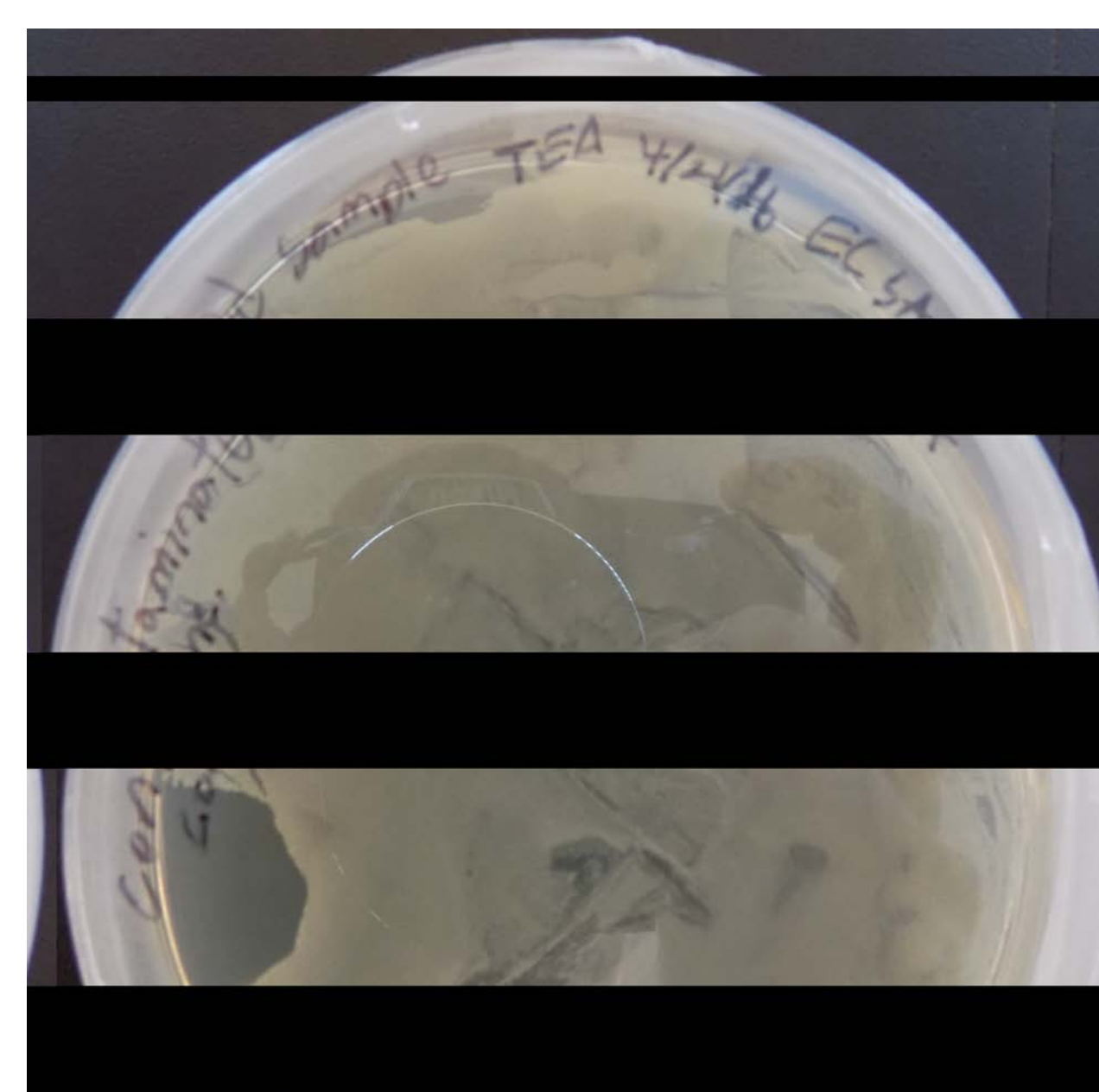
- Raise awareness to citizens of benefits of using soap
- Access to tools to clean water
- Easy, hands on application to sanitation
- Increased knowledge about sanitation
- Demand for an improved water infrastructure in Port Au Prince

Statistics

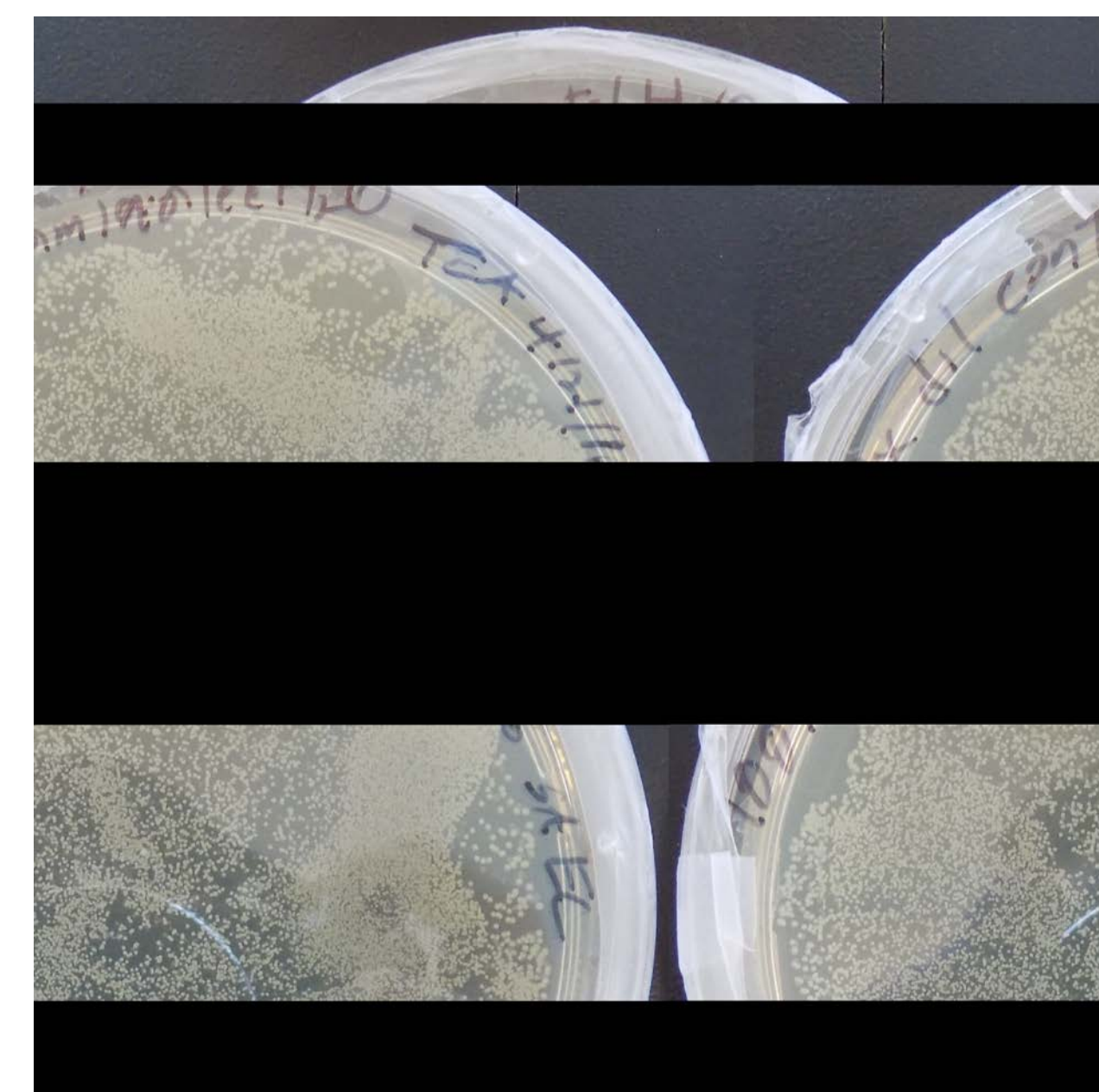
Timeframe	Average Water Use	Purification Packet Use
Per Month	144.63 gal	55
Per Day	4.76 gal	2
One bar of soap = 1 gal of soft soap		



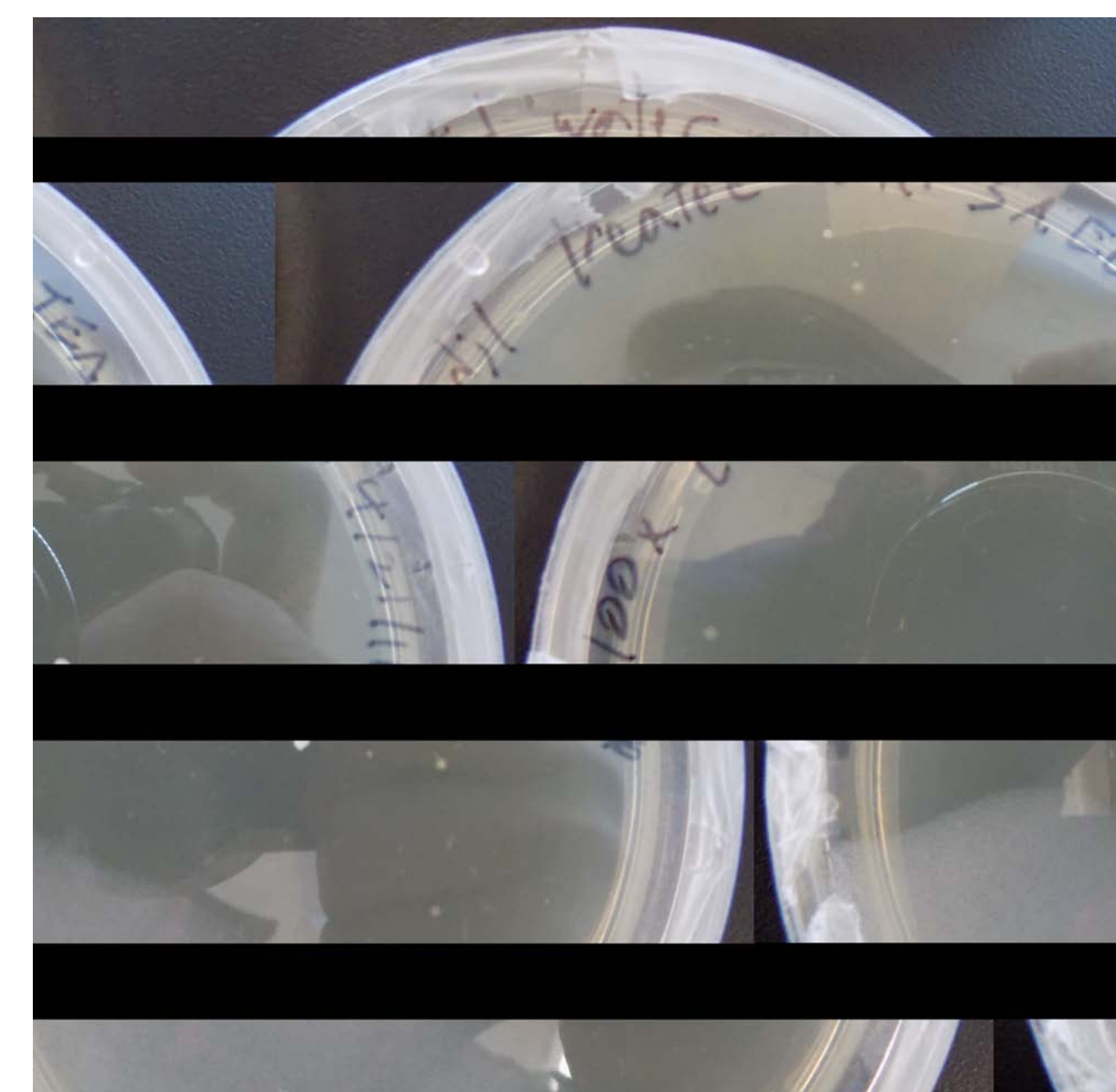
DI Water (Control)



Contaminated Water



100X Distilled Contaminated Water



Contaminated Water After Treatment

Soap Making Process

- Grate the soap.
- Place the grated soap flakes into a large pot and add the water and glycerin.
- Put the pot on the stove and turn the burner up to a medium heat.
- Set your homemade soap aside to cool. Let it sit overnight or for a few hours at a minimum.
- Pour the soft-soap into containers.
- This process does not increase cost to send soap.

