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

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

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Average Water Use</th>
<th>Purification Packet Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Month</td>
<td>144.63 gal</td>
<td>55</td>
</tr>
<tr>
<td>Per Day</td>
<td>4.76 gal</td>
<td>2</td>
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</tbody>
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One bar of soap = 1 gal of soft soap

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.