

Egypt - Shandaweel Village Water Filter - Sanivation Team

In Shandawel village the local community is struggling with the lack of clean drinking water, as SaniVation team, helping to reduce inequality in communities (SDG 10) with the focus on providing clean water & sanitation (SDG 6) we have designed this easy solution to overcome this challenge.

 Difficulté Facile

 Durée 2 heure(s)

 Catégories Bien-être & Santé, Recyclage & Upcycling

 Coût 24.4 USD (\$)

Sommaire

Introduction

Étape 1 - Stage one

Étape 2 - Stage 2

Étape 3 - Stage 3

Étape 4 - Stage 4

Étape 5 - Stage 5

Commentaires

Introduction

Shandaweel Village has long suffered from the pollution of their only source of clean drinking water, causing high rates of kidney failure, diseases & viruses, and eventually mortality.

In a poor & underprivileged village, people constantly suffer from that, with temporary and unsustainable solutions only scarring their wounds more deeper, this was the time to intervene.

Focusing on solving the problem in a sustainable way, using ecofriendly materials that are organic, available, accessible and affordable to the locals, we came up with the idea of creating a simple filtration system that can save a lot of pain, and lives. Using a very basic & proven way to clean polluted water.

See CDC report on slow sand filter: [<https://www.cdc.gov/safewater/sand-filtration.html#effectiveness> Slow Sand Filtration

Matériaux

Outils

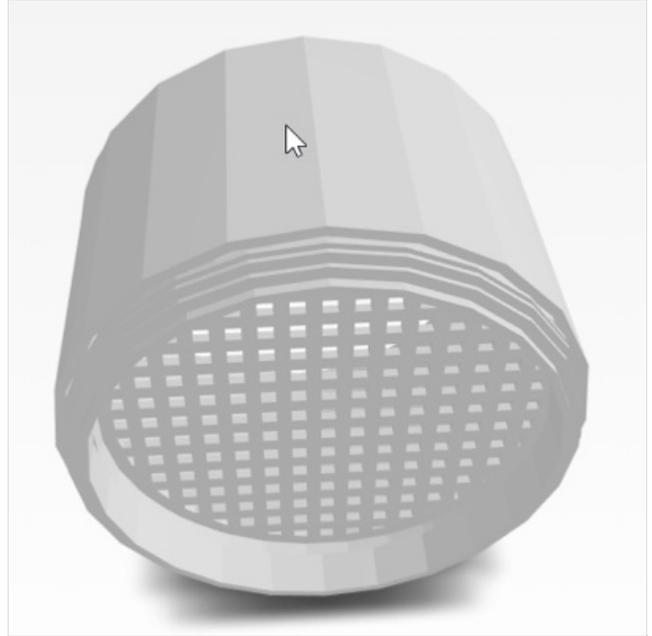
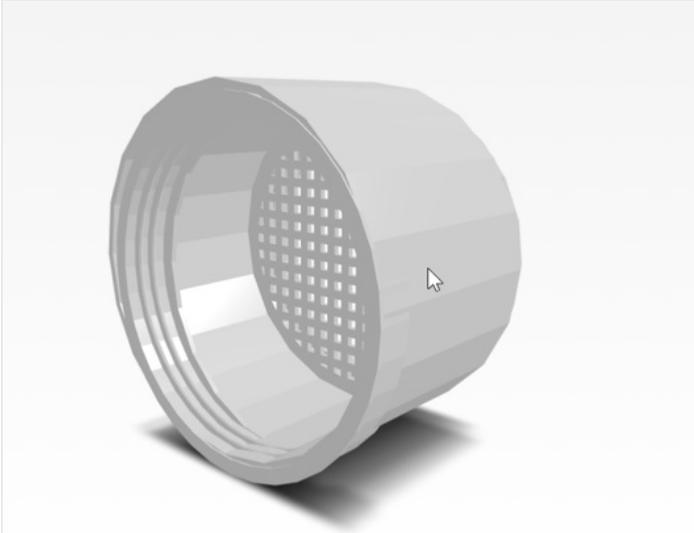
Étape 1 - Stage one

This is the 1st part of the water filter, with a screw locking water filter that attaches to the water funnel



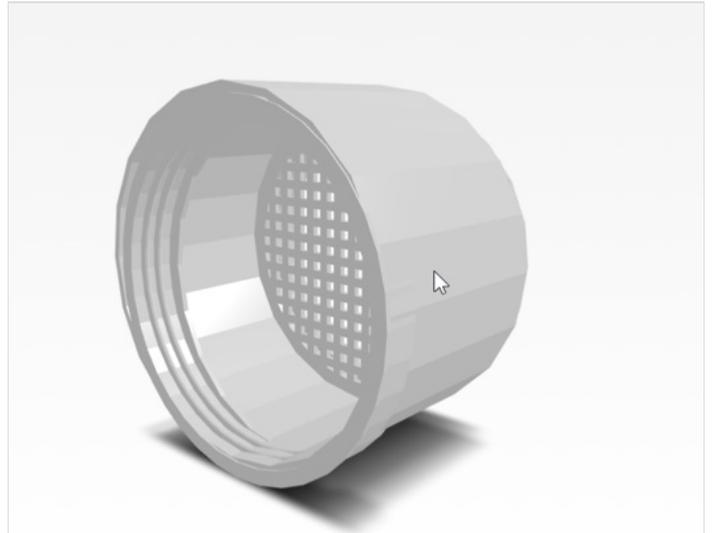
Étape 2 - Stage 2

A interlock able stage of filtration that contains a sand filter that water passes through from the inlet to go across the sand layer into a porous filter



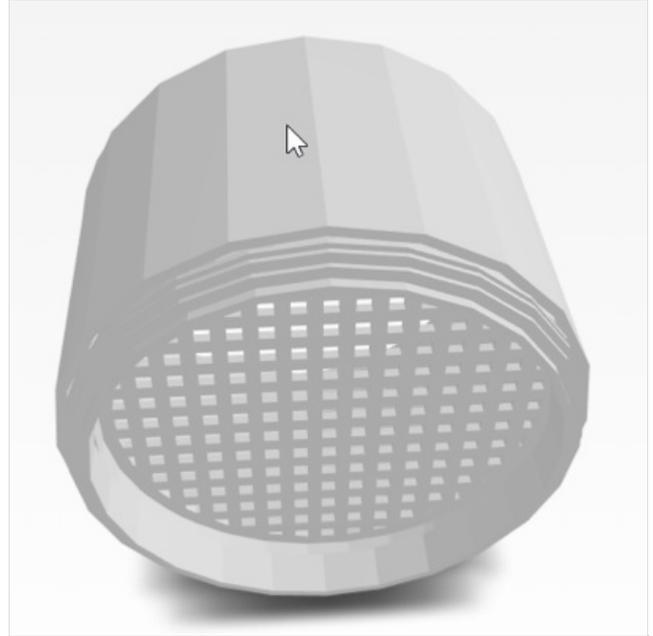
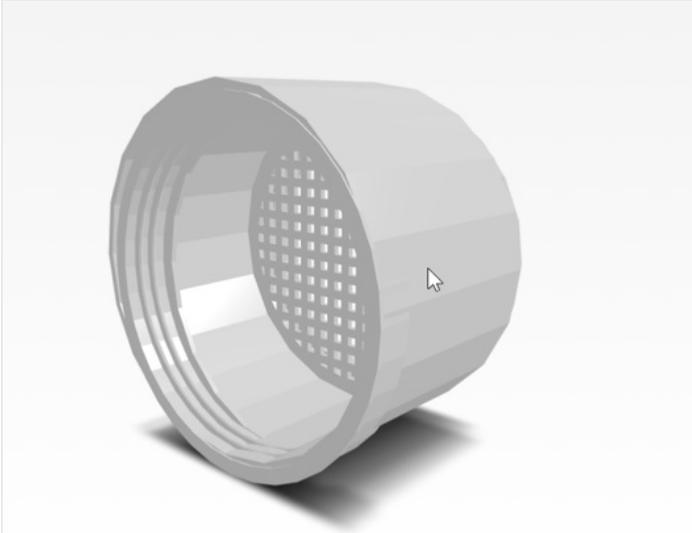
Étape 3 - Stage 3

Another part which water from the sand filter pours into the next level, charcoal filter



Étape 4 - Stage 4

Water comes over from the active charcoal part into the last filtration level, gravel, which filters the water efficiently and adds essential minerals before moving out to the last stage



Étape 5 - Stage 5

Final level, where clean drinking water flows into the water outlet after going through the 3 stage filtration system into a container.

