



We create Food Growing SYSTEMS to feed the world.



MISSION PROJECT 11: HYDROPONIC BUCKET GARDEN

Overview

It's no secret that growing food in poor regions of sub-Saharan Africa can be challenging. The soil is often depleted of nutrients from excessive previous usage. Then comes the challenge of small animals and rodents eating the crops. And finally, there is the unreliability of rain to water the crops.

By growing crops using hydroponics, virtually 100% of the minerals needed to grow healthy food are present. By raising the beds up 3 feet off the ground, they are difficult for pests to disturb them. And by providing a protected environment for the plants to grow, they thrive and produce food with a very predictable success rate. Our solutions add in the factor of EXTREME VALUE - making it a win/win for everyone involved.

Our Mission Statement

World Hunger Team seeks to improve the health and well-being of people in poverty by enabling access to organic, sustainable nutrition and safe, clean drinking water.

About Us

World Hunger Team, founded in 2009 in Nashville, Tennessee, answers Jesus' call to 'Feed my sheep' by creating food systems in underserved areas.

In Namalemba Village, Uganda, we funded a 7-acre research farm and maize milling operation, along with cultivating various crops and raising livestock.

Solution

By utilizing locally sourced materials, we will construct hydroponic gardens to support the local area.

The materials used include:

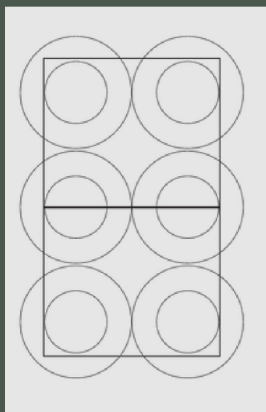
- Used Tires
- Used Wooden Pallets
- 5-gallon Plastic Pails

Current Programs

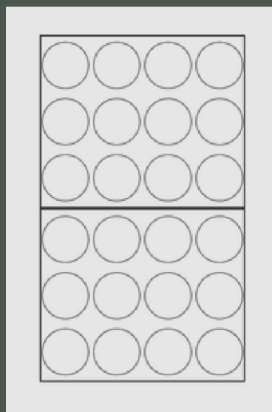
The illustration on the left demonstrates the arrangement of two layers of 6 tires beneath two side-by-side pallets, each measuring 40" wide by 48" tall.

On the right, you can see 12 standard 5-gallon plastic pails placed on each pallet. In a relatively small 7 x 4-foot space, we can cultivate 24 food plants.

Each of these 24-plant gardens has a total initial cost of less than \$300 when landed. This equates to a startup cost of less than \$12.50 per plant, for a system with a service life of over 10 years. The only ongoing expenses are for nutrients and seeds, both of which are relatively inexpensive. This stands in contrast to conventional hydroponics systems that can cost tens or even hundreds of thousands of dollars to establish.



Two layers of 6 tires make the base for our pallets to sit on.



You can place twelve 5-gal plastic pails on each pallet.

One of the biggest hurdles in designing any food growing systems for sub-Saharan Africa is the access to materials. It is often cost prohibitive to bring building supplies in from far distances. Our solution aims to use items that can be found easily and affordably.



Used tires are easily found, and so are used wooden pallets.



We place two tires in a stack and top them with pallets. Five gallon plastic pails are placed on top of the pallets to form a waist-high work space to grow plants.

Our Ask

By keeping the cost of our programs low, we seek to expand them rapidly to help tackle world hunger.

If you would like to sponsor a garden in sub-Saharan African, please reach out us. Your one-time donation could continue to feed people for many years to come.