



Sun24

No Cost / Low Cost

Traditional Cookstove Modifications

Hyperlinks: <https://docs.google.com/document/d/1EjZDSAnyZKsilJcnVZhCvkBcBctbSmvxbFinzxQInTM/edit>

Transitional

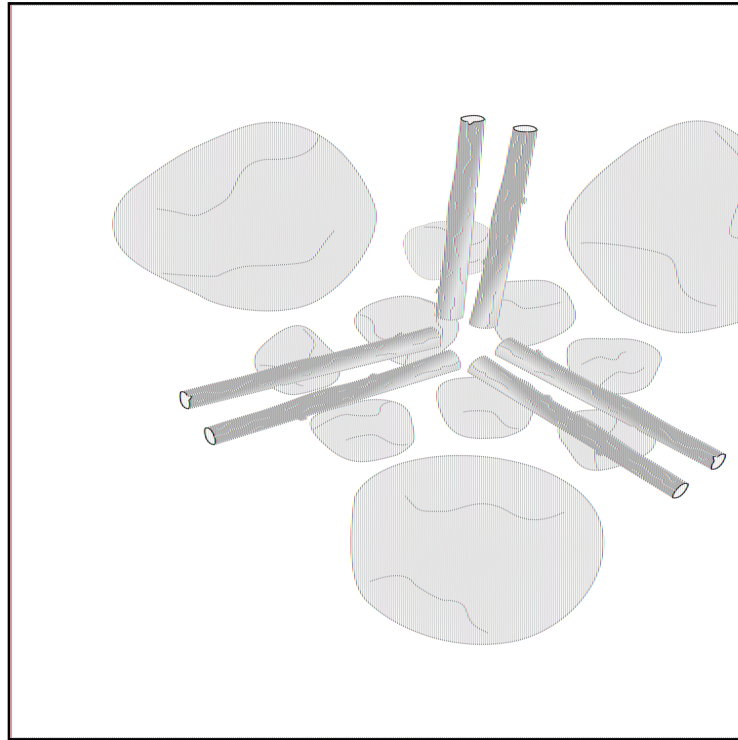
Complimentary

Rock Beds

(Wood Cookstoves)

$\frac{1}{3}$ Less Wood

Free Simple



Rock Bed Results

(Spreading an idea, not a product)

6 million HH in 10 months of training

- Uganda
- Kenya
- Ghana
- India (Tamil Nadu)
- Tanzania
- Guinea
- Mali
- Sierra Leone
- Senegal

17 million tonnes less CO₂e every year

1.5 trillion hours women save collecting firewood every year

Rock Bed on Metal Grate

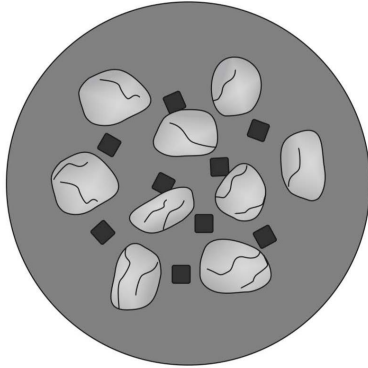
(Wood Cookstoves)

46% less firewood



Rock Beds

(Charcoal Cookstoves)

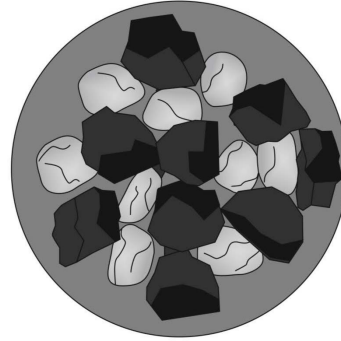


U of Nairobi

13% less charcoal and CO₂

37% less CO

62% less PM



Uganda Forestry College

24% less charcoal

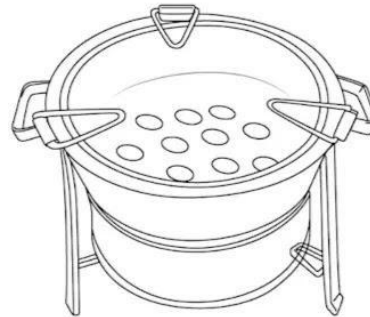
40% less CO

PM unchanged

24% longer time to boil

Second Metal Grate

(Charcoal Cookstoves)



Sectional Hanging Pot Skirt

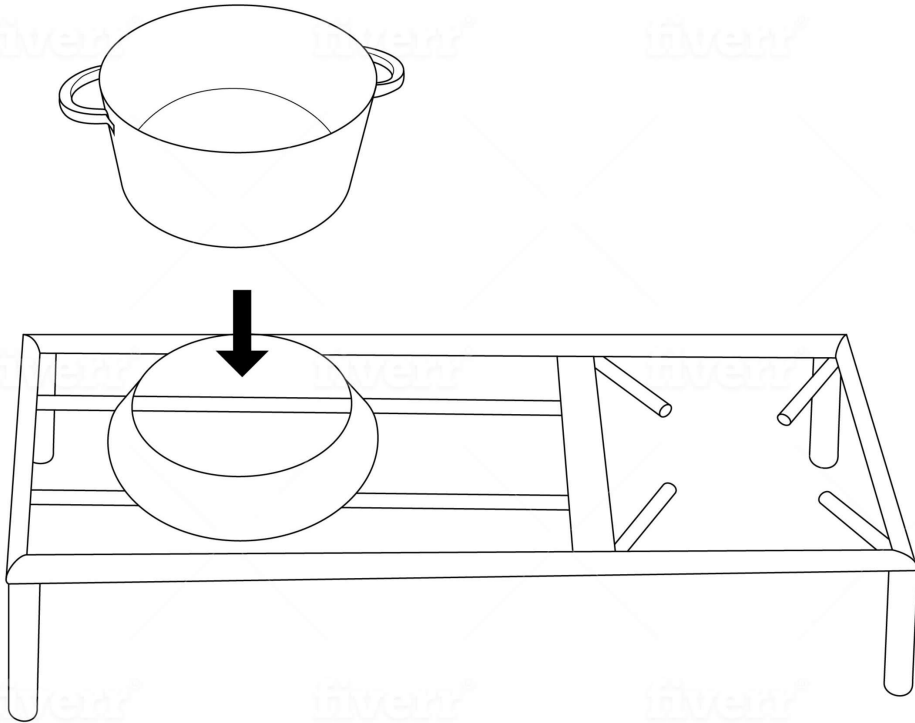
(Three-Stone Cookstoves)

1 USD per set of three



Conical Pot Skirt

(Open-fire Cookstoves)



42% less firewood

Maize Cobs

Maize is the most-produced cereal worldwide.

Maize is the most important food crop.

Many smallholder farmers in Africa grow maize.

Many women use maize cobs for fuel.

Typically women pile the cobs on the ground to burn under a cookpot.

Many countries near the equator have 2 harvests.

Maize Cobs

Placing cobs in a charcoal cookstove on a bed of small rocks:
Increases efficiency
Decreases smoke

38% less charcoal
(one test)



Help Needed

1. Innovators
2. Implementing Organizations
3. Money

Water Disinfection

Mix boiling water with contaminated water

One billion people boil water

1:1 Boiling to contaminated water pasteurizes the water.

Simple Solar Disinfection

Paint one side of 20L jerrycan black

Face the sun

Cover with clear plastic sheeting (greenhouse)