# Two Pot Rocket Lorena Uganda



# **Type**

Inbuilt fixed household rocket mud stove with two saucepan cavities and a chimney.

#### **Names**

Rocket Lorena (Uganda) Rocket Mud Stove (Kenya)

#### Fuel

fuel wood

# Country of Origin/Dissemination Area

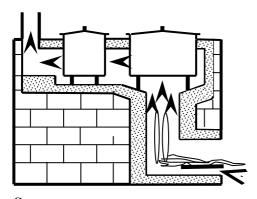
Uganda, initiation November 2004. 200,000 stoves disseminated until Dec. 2006 in Bushenyi and Rakai districts.

Kenya, Kisii District, initiation May 2006. 8,000 stoves built until Dec 2006

In both areas a coverage of ca. 80% of the households achieved.

#### Users

Rural, peri-urban households



**Source:** 

## **General Description**

Fixed, inbuilt massive mud stove with

- two pot cavities and chimney
- single fuel feed and combustion chamber.
- Rocket principle with shelf for firewood, high burning chamber, inserted pots and well defined airflow.

Pot cavities customised for specific pot diameters.

Rectangular cross section, overall sizes dependent on pot diameters. Average size 110 cm x 60cm, height 40 cm. Chimney height 1m (but is sometimes adjusted depending on the nature of the kitchen).

Average live span 2 years

#### Materials used

Built of an insulating clay mixture. Well binding mud mixed with organic material like chopped grass, sawdust or chopped dry banana leaves.

Either as a homogenous block or out of stones and bricks plastered with this insulating clay mixture.

### **Efficiency**

Saves up to 50 - 60% of the firewood that would be consumed using the three stone fire stove if the two pot cavities are used in a proper way.

High potential to diminish the indoor air pollution through chimney and better fuelwood combustion

# **Production / Supply**

Produced by local artisans that are trained and supervised by local monitors.

The stove builders live in the villages and are directly contracted and paid by the users

No sophisticated tools are necessary but appropriate binding clay soil.

Simple, efficient quick guide for appropriate measurements is available.

1 stove builder can produce 300 stoves / year.

# **Price (2006)**

1 USD – 20 USD Depending on size and negotiating ability

In Kenya the average price is 5 US\$

Uganda 6 US\$ (but the deviation in average price is very high)



### Strengths and weaknesses

- + Efficient, cheap stove with great potential to reduce the indoor air pollution.
- + Gained very quick very high acceptance

- + Income generation in the villages through use of locally available material and the employment of local stove builders.
- Only applicable where the appropriate clay soil and organic material is available.
- Wear and tear especially in fire chamber and also at potrests and pot cavities where heavy stirring is a cooking habit (Sima, Ugali).
- Regular maintenance needed.
- Also users need certain know-how to use the stove properly and to carry out a proper maintenance.
- The dissemination system with trained local stove builders needs a well functioning quality monitoring system that has to be maintained over years.

#### **Available documents:**

 Ministry of Energy and Mineral Development (Uganda), Energy Advisory project: How to build the improved Household Stoves – A construction Manual for the Rocket-Lorena and the Shielded Fire Stoves. http://www.energyandminerals.go.ug/DOCS/H OUSEHOLD%20Stoves%20Construction%20 Manual.pdf

Source of pictures:

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