

# Kenya Ceramic Jiko (KCJ)



## Type

Portable household stove with one saucepan cavity, and without chimney.

Metal stove body with ceramic liner.

## Names

Kenya Ceramic Jiko, KCJ

Kenyan Jico

In Senegal: Diambar or Jambar

The stove is known by many different names in different countries.

## Fuel

Charcoal

## Country of Origin / Dissemination Area

Launched in Kenya in 1981. The design was based on the Thai Bucket stove.

The stove was developed during the research and development stages of the GTZ - Special Energy Programme, which started in 1983 in Kenya in collaboration with a number of research/academic institutions, and local potters in Kenya.

More than 600,000 stoves disseminated in Kenya by 1993.

Today the KCJ is commercially available in most urban markets in East and Central African countries, as well as in West Africa. The market penetration is often more than 50% among urban households.

## Users

Urban and peri-urban households

## General Description

Portable metal charcoal stove, with a ceramic liner. It is available in different standard sizes with diameters ranging from 250 mm – 310 mm.

## Materials used

The cladding is made of scrap metal, with a ceramic liner made of clay mixture, and cement-vermiculite as binder.



## Efficiency

The stove saves about 30% of the charcoal that would be consumed using more traditional charcoal stoves.

## Production / Supply

Potters and ceramics manufacturers make the ceramic liner. Production methods are either mechanized or semi-mechanized. Clay is prepared and moulded, holes are pierced into the clay to form the grate, and the moulding is fired in a traditional pit/surface or brick kiln.

The metal cladding is made by informal sector artisans and workers in small-scale industries. It involves cutting, forming and folding scrap metal.

Assembly of the metal components involves riveting and welding. The ceramic liner is set into the metal cladding with cement-vermiculite mixture.

Today, the stove is produced and disseminated through fully commercial markets (without external support), by microenterprises, artisans, private outlets, and hardware shops.

**Price:** In Kenya, the price of KCJ varies according to size between Ksh 250 – 600 ie. (About 3.50 – 8.50 USD) (2008).



## Strengths and weaknesses

### Positive

- + A very well known stove, available nearly everywhere in Africa.
- + Rapid level of adoption by large numbers of people
- + Easy to use, fairly durable.
- + Reasonable efficiency

### Negative

- The pot sits on top of the stove, rather than being set inside it, and it therefore allows heat losses from the sides.

## Available documents:

Beatrix Westhoff, Dorsi Germann: Stove Images - A Documentation of Improved and Traditional Stoves in Africa, Asia and Latin America. Pages 21 and 139.

Available on website: [www.gtz.de/HERA](http://www.gtz.de/HERA)

Source of pictures: GTZ Kenya, GTZ Tanzania

