



Recycled charcoal briquettes in Mozambique

~Affordable and quality energy for all ~

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Verde Africa, Lda.

Junko Arisaka
Chief Executive Officer
@ Maputo, Mozambique

About Verde Africa, Lda.

Verde Africa, Lda. is a limited liability company established in 2016 in Maputo, Mozambique.

The company has Japanese and Mozambican investors, and currently holds 9 Mozambican staff and 2 Japanese.



We started selling in April 2017. Verde Africa, Lda. currently yields revenue of 1,368 USD monthly in quarterly average, and have capacity to produce 17 ton per month.

What we do

Our work is to produce and sell sustainable alternative for wood charcoal made by recycled biomass



Replace it by recycled biomass

Briquettes



Charcoal Market (Maputo and across Africa)

1

Population



1 million

86% of Maputo city population

2

Quantity consumed



730,000m³

Estimated annual consumption in Maputo

3

Amount in transaction



8 billion \$

Annual transaction value across Africa

Our product

Solid fuel made with charcoal dust with binder of cassava flour, only locally available materials



Charcoal dust

+



Cassava flour

=



**Briquette
MACAMANENE**

Macamanene is packed and sold for 1kg, 4.5Kg, 40Kg, 80Kg

Reason to use Macamanene

Our customers can use Macamanene without changing their style of cooking or spending a bulk of money as initial cost. They can also save money by using long burning charcoal at lower price.

Same usage

Same cooking style

No initial cost

Same stoves and pots

Cheaper than charcoal

Customers save 38-70%

Fire lasts longer

For over 3 hours, save 15%



Cooking energy is part of life style. Reason to shift should be clear to all.
We offer customers to understand the benefits by experience as to be a repeater of our product.

Our ingredients - Charcoal dust -

We choose charcoal dust based on the balance between collection cost and the final product quality.

Access to the quantity

Approximately 15% of charcoal is wasted as dust. Available whole year with consistence

Low processing cost

Time and labor cost of carbonization

Low transportation cost

Amount after carbonization

Low ash content ^{*1}

2% wood based biomass

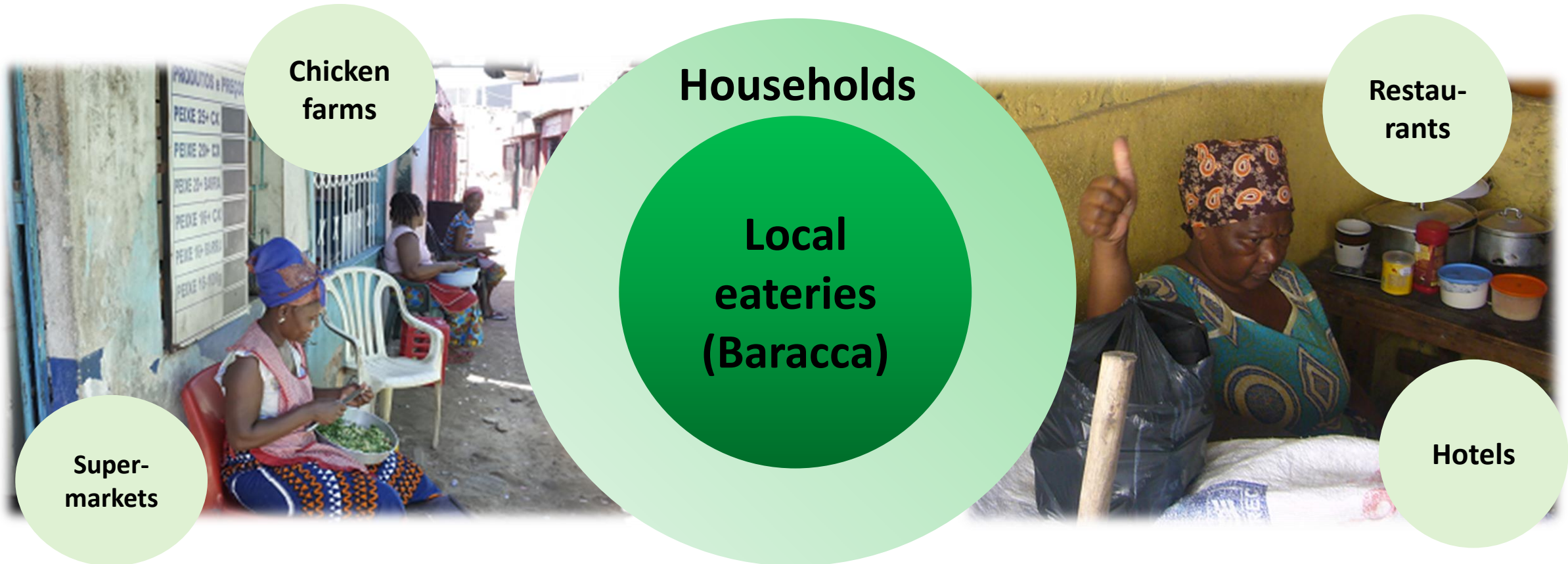


Collection is done by a company track, and the staff control the quality through direct communication with charcoal sellers

*1 THE USE OF BIOMASS WASTES TO FABRICATE CHARCOAL SUBSTITUTES IN KENYA, 2004 Feasibility study

Who is our targeted customers?

Verde Africa's primary target is local eateries called barracas, then followed by households. It is largely B to C, or to Micro-entrepreneurs.



They are relatively conservative population, though the main drive of the charcoal demand, also cost sensitive

How we reach out to the market?

Customer retention is one of the biggest challenge for Verde Africa, as briquettes are new to most Mozambican people. Our strategy to penetrate the market emphasizes personal interaction to understand customers' needs.

Local eateries (Baracca)

daily visit with delivery, free sample try-out, chef do Mercado, personal account



Households

word of mouth, friends' campaign, Free delivery of the large sack to the customers' house, distributors



We value face to Face interactions with customers with focus on customer retention.
Delivery as a way to collect customers' direct feedback as market penetration is not so easy.

Way forward

Our short term goal is to become financially and operationally sustainable before the end of 2018.

Profitability

- Cover basic operation costs by sales revenue by 2018 April
- Become financially and operationally sustainable by 2018 December
- Start yielding profit by 2019 January

Investment and scale

- Sell 90 ton sales per month in Maputo area (9 times more than now)
- Build our own factory by 2019 June
- Carbonization plant to utilize wood chip waste from local factories

Our long – term goals

- To see our customers go up to the next level in terms of quality of life, eat what they want & live with comfort in a city filled with Green.
- To see their children going to school with the money mother saved.
- To see farmers smile with abundant harvest from their field, and live with confidence.



Production steps

Steps of production is Crush – Mix – Press – Dry. It is labor intensive work, based on subsistent technology.

Crush



Remove garbages from Charcoal dust. Crush charcoal dust into powder.

Mix



Mix the charcoal powder with water and binder (cooked cassava past) with specific mix ratio.

Press



Put it into the screw press machine to form into Briquettes

Dry



Sun dry for 7 days, then test and pack.