

Maa Briquette



Why to choose this solution?

This solution uses charcoal dust, maize cobs, maize stalks, and waste vegetable matter to make smokeless briquettes which are dried and then sold as fuel. The briquettes burn three times longer than charcoal, and are smokeless, hence pose much less risk to the respiratory health of the user. At the same time, use of briquettes resolves the environmental challenge of exploitation of trees.

Savings per day or production:

Saves about 60 trees per day per 500 households. The briquettes burn three times longer than charcoal and are smokeless, hence posing minimal risk to the user respiratory health.

Cost in money and in own time to construct:

Cost about six Million Kenya Shillings (USD 60,000).

Lifetime:

Not specified.

Maintenance needed:

Repair of the briquetting machine in case of any breakdown.

Resources needed in use:

Improved cookstoves (Jikos) to use the briquettes for cooking.

Problems and limits:

It is a challenge to revamp the sole-proprietor business into a company due to numerous prerequisites and capital required for expansion. For the enterprise to be considered as a company, a lot of investment has to be put in place, licensing, upscaling equipment, and mentors are needed.

Where and how can you get it or make it?

Available in Kajiado County ,Kenya.

Skills needed to produce, install. maintenance, use:

Production of the briquettes requires a short training session.

How to use it:

<https://youtu.be/QNiROZI9dGw>

How to maintain it:

To be added.

Climate effect (if any):

According to George Mochu, the owner of Maa Briquette, this solution has helped to reduce deforestation significantly. Initially, ten trees would be cut daily-- amounting to seventy trees per week -- for fuel. With the use of these briquettes, only one or two trees are felled per week for the over 500 households reached.

Where it is used and how many users are there?

Used in Narok County with about 2500 users.

Why is it successful?

It is an affordable, easily accessible fuel. It is smokeless, efficient, and environmentally friendly.

If you can make it, a short description, typical problems, materials needed:

To make Maa Briquettes, the user should first source the raw materials, which are charcoal dust, maize cobs, maize stalks, and any agricultural waste, all of which must be carbonized first for production. These carbonized materials are sorted by sieving, then put through a hammer mill, where they are ground to a fine powder. They then go into a mixing machine, where they are mixed with a binder and water. After production, they are dried either outdoors or inside a solar dryer.

How to make it (if possible):

<https://youtu.be/QNiROZI9dGw>

How is it delivered and by whom?

Maa briquettes are either delivered to customers by sales agents in pickup vehicles or bought directly and transported by customers.

Successful financial model

A local bank loan financed the purchase of the Briquette machine. Repayment of the loan has been facilitated through the returns and also through training other people on how to make the briquettes. The enterprise won the 2014 Green Innovation Award, which has brought further technical assistance in terms of planning. Successful partnerships with the National Environment Trust Fund from Kenya and with the Kenya Climate Change Innovation Center were involved. The company also conducted market research and has established a market base.

What policies and strategies helped the success?

Online marketing is done via social media, with information as to whether the briquettes are ready for purchase. Successful partnerships with the National Environment Trust Fund from Kenya and with the Kenya Climate Change Innovation Center assisted the owner in creating a feasible business plan.

More info:

<https://www.changemakers.com/discussions/entries/maa-briquettes> and

<https://www.charcoalproject.org/entrepreneurs/maa-briquettes/>

Sources:

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When was the case uploaded?

2020-09-29

*Case from Catalogue of Local Sustainable Solutions
in East Africa. Read more and see partners at
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