BlueFlame BioGaz (Biogas) Digester







Why to choose this solution?
The BlueFlame BioGaz biogas-digesters are constructed from either concrete or plastic. They are safe to use for heating, for cooking, and for lighting. They can be used commercially or domestically. They also produce organic fertilizer that can be used safely and profitably in farmed fields. Such fertilizer is biologically very stable, and it has the following properties: very high nutrient content, very minimal pathogenic microorganisms, reduced odour, and ease of application because it is liquid.

Savings per day or production:
It saves the user the money that could have been used to pay for waste disposal. Moreover, it saves the user the money that could have been used to pay for commercial sources of energy. Such commercial sources of energy include LPG gas, electricity, charcoal, and firewood.

Cost in money and in own time to construct:
The price of a 4000-liter digester is KSh 75,000 (USD 750). Installation takes about 3 days.

Lifetime:
20 Years.

Maintenance needed:
BlueFlame energy solutions offers maintenance services for biogas systems to make sure they continue working to the satisfaction of our clients. It also rehabilitates non-working biogas systems to put them back into productivity.

Resources needed in use:
The bio-digesters accept any organic waste material, which may include biodegradable waste from industries and treatment plants, rotten food from shops and homes, biowaste that is given by consumers, sludge given from wastewater treatment plants, manure, and biomass from agriculture.

Problems and limits:
It is expensive; hence, most people are not able to afford it.

Where and how can you get it or make it?
Available at BlueFlame, a water- and energy- solutions company in Nairobi, Kenya. But they are also installed throughout Kenya. Interested clients can contact the BlueFlame company.

Skills needed to produce, install. maintenance, use:
Installation requires some training in engineering and biology; users receive a short introduction.

How to use it:
To be added.

How to maintain it:
To be added.

Climate effect (if any):
Not specified.

Where it is used and how many users are there?
Used in Kenya.

Why is it successful?
They succeed because they have a lifespan of over 20 years (long-lasting), they are easy to install, the plastic ones are portable, they come with a five-year warranty, and purchase comes with three months of free after-sales service.

If you can make it, a short description, typical problems, materials needed:
The biodigester consists of a sealed tank that holds biowaste and a means to collect produced gases. Use requires a way to mix the biomatter. One also needs to pipe off the gas and to dry off the effluent. When planning, one always needs to estimate how much organic waste can be collected in a day for putting in the tank and to consider which model of the digester is the best, as they are built differently (either concrete or plastic). One also must use adhesives and tools.

How to make it (if possible):
To be added.

How is it delivered and by whom?
The biogas digesters are delivered by skilled teams from BlueFlame Water and Energy Solutions Company. The field officers are contacted by clients who need the technology installed. The field officers then refabricate and install the system according to the clientâ€™s energy needs.

Successful financial model
Support for development, training, public relations, and successful partnerships.

What policies and strategies helped the success?
Kenya Biogas Programme (KBP), put in place to guide the operation.

More info:
https://www.blueflamebiodigesters.com

Sources:
Blueflame Water and Energy Solutions, Kahawa Sukari. Kahawa Sukari Avenue Nairobi, Kenya. Email: info@blueflamebiodigesters.com, Tel: +254 714 850418.

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