



Above: Banana briquettes (image: BBC).

Far Left: Rotting banana tree waste in Kwale village.

Left: Plasticine prototype to illustrate concept.

Below Left: 'Jua Kali' craftsman building the 'Kwale Fuel Press'.

Below: 'Kwale Fuel Press' after firing.



Fuel Group 2 'Kwale Banana Fuel Press':

Wood is the primary fuel source in Kwale but is scarce. Unlicensed tree felling brings harsh penalties. Charcoal is sold in the village but is very expensive. Bananas are plentiful...

This group decided to tackle the fuel challenge by searching for locally-relevant ways of creating bio-fuel.

Research highlighted a pioneering study at Nottingham university which suggested that rotten banana waste (peel, palm and bark) could be manually mixed with sawdust to create a highly efficient fuel.

The students designed a manual fuel press tool to aid the production of ring-shaped briquettes which were believed to burn more efficiently than block briquettes.

The 'Kwale Banana Fuel Press' is hand-made from local clay. Once fired, it is strong enough to allow manual-pressing of banana slurry, draining excess liquid in the process and forming round briquettes.

The briquettes are sun-dried and can be stored until used or sold as surplus.

Fuel Group 2, 'Kwale Banana Fuel Press'

- Manual tool for production of bio fuel ring-shaped briquettes.
- Fuel slurry made from rotten banana tree waste & sawdust.
- Hand-made, 100% Chungu' clay construction
- Can be freely appropriated
- Labour-saving tool
- Affords batch production of briquettes which can be sold or traded.

