Charcoal Briquettes and improved Cook Stoves Project in Uganda.

- Ikalany Betty – TEWDI
A women’s Community Based non-profit organization

Location: Soroti district, Northeastern Uganda.

Major Activities:
- Community education and awareness creation on bioenergy for cooking and heating.
- Capacity building of farmer groups in recycling agricultural waste to make bio-char and reforestation.

TEWDI has launched a for profit social business enterprise to make and sell charcoal briquettes and improved cook stoves.
Appropriate Energy Saving Technologies Limited

- For profit briquette manufacturer owned by non-profit (TEWDI)
- Makes and sells carbonized charcoal briquettes and improved energy saving cook stoves.
- Semi-urban area with ample access to agricultural waste
- Centralized production of char and briquettes
Current market:
- Municipality of Soroti, population 70,000

Long–term target market:
- Soroti district, population 320,000.
- Entire Teso region, population 5 million.

Customers:
- Households
- Institutions Such as Schools, Hotels, Restaurants
- Poultry Farms
Feedstock / Technology

- **Feedstock**: Carbonized agricultural waste including maize cobs, groundnuts and charcoal dust.
- **Binder**: Cassava flour.
- **Charring kilns**: modified 55-gallon used oil drums.
- **Briquette production**: Pressed using diesel-powered extruder which was modified from a meat grinder.
- **Additional technology**: Maize grinder improvised to grind charcoal dust.
Business Model

Current:
- Char production, briquettes, and cook stove sales in a centralized location in Soroti municipality.
- Sales through retail outlets.
- Feedstock supplied from local mills and other large volume locations.

Future:
- Transition to decentralized char production through engaging farmers. Maintain centralized briquette production.
Social/Environmental Impact

- Social business enterprise employing 20 people.
- 40 farmers and grinding mill owners receiving payment for agricultural waste and binder.
- Consumers saving money with energy efficient stoves and lower cost fuel.
- Improved public health from use of clean cook stoves and smokeless briquettes.
- A lot of wood saved through use of alternative fuel.
- Women and children saved from walking long distances in search of firewood.
Charcoal Briquette Making Process
Cookstove Making Process
Current Challenges

- Insufficient funds to acquire better machinery.
- Limited space to dry the briquettes due to high volumes handled.
- Limited awareness by end users and microfinance institutions.
**How:**
HFI invests technical, financial, and business management resources in social enterprises that integrate clean tech and green fuels.

**Where:**
Currently in East Africa. Expand to rest of SSA and Asia.

**Who:**
The Charcoal Project + D-Lab’s Scale-Ups Program at MIT

**What:**
“The Harvest Fuel Initiative helps grow small businesses in the developing world that promote better fuels and clean combustion technologies for people who depend on wood and charcoal for their daily cooking and heating needs.”

**Why:**
Makes business sense (income) Jobs Health Environmental protection
Thank you for listening!