



Improved Cook Stoves and Briquettes for East Africa:

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Developing Energy Enterprises Project (DEEP) EA



Project objective: Development of a sustainable and widespread industry of micro and small energy enterprises in Kenya, Tanzania and Uganda.

Project aim:

- 1800 micro and small enterprises in Kenya, Tanzania and Uganda,
- Reach 1.8 million beneficiaries
- At least 430 enterprises surviving by the end of the programme (sustainable).

Main Energy Technologies

- Energy businesses supported are demand driven
- Entrepreneurs involved in the key energy technology areas include the following:
 - Improved charcoal Stoves: 344 (48%)
 - Solar based technologies 158 (22.1%)
 - Briquettes 135 (18.9%)
 - Others (biogas, biofuel etc) 78 (11%)

Improved Cook Stoves (ICS)

- Sector has been active since 1980s
- Donor driven with many actors

Gaps in ICS in East Africa

- Weak in Business Development and Growth
- Lack of value chain, low level of coordination
- Low quality products
- Lack of financial support
- Lack of standards
- Artisanal in nature (efficiency?)

Opportunities in ICS

- High potential market in rural, peri-urban and urban areas
- Low capital requirement hence affordable (and possible) to start a business especially in rural regions
- Modular in nature –i.e. focus could be on cladding, clay liner production or stove assembling.

Examples of ICS in use in East Africa

- Kenya Ceramic Jiko (KCJ)
- Kuni Mbili
- Rocket stove



An entrepreneur assembling KCJ stoves



Completed KCJ stoves ready for the market



Briquetting Technology

- A household and institutional fuel made by compacting/solidifying biomass waste
- Carbonized and non-carbonized
- Manually moulded or extruded electrically
- Made from various raw materials: Charcoal dust, bagasse, saw dust, paper, coffee husks, coconut husk etc
- A growing energy business

Why Briquettes?

- Adds value to biomass waste
- Reduces pressure on the forestry resources
- Raw materials readily available
- Strengthens rural economy as technology is simple, business can run parallel to other businesses
- Ready market at household and at institutional level

Gaps in Briquettes

- Lack of briquettes quality standards
- Lack of skills in making good briquettes
- Considered pricy compared to firewood and charcoal
- Lack of good quality machines in the market
- Awareness still low
- Unwillingness of customers to pay premium for environmental benefits

Briquettes



DEEP EA Interventions on ICS and Briquettes



- Organising group networking for entrepreneurs, demonstration trips.
- Providing technical and business mentorship
- Supporting the entrepreneurs with technology specific materials coupled with market development support
- Linking entrepreneurs with financing institutions – SACCOs, MFIs through loan guarantees

Way forward

- Strengthening solar, briquettes and ICS entrepreneurs using a value chain approach
- Strengthening financing linkages
- Explore carbon financing possibilities to leverage the energy product cost where possible – mainly through POA
- Establishment of a platform for sustained energy business support.

Thank you for your attention!!



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