



Global Conference: Rural Energy Access

Catalyzing Rural Energy Access - Kenyan experience

Addis Ababa

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Energising Development

Kenya Country Programme



Kenya – General Statistics

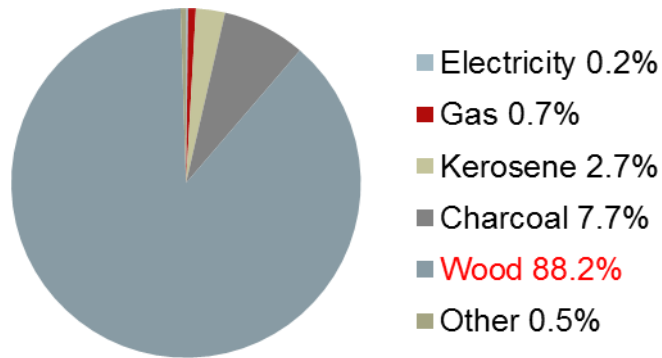
1. Population (2010) 41,070,934 = 8.214 million households
 - rural **78% population**
 - urban 22% population

2. National wood consumption
 - currently about **40** million m³/yr
 - **about 80% consumed as fuelwood**
 - most burned on inefficient cooking technologies

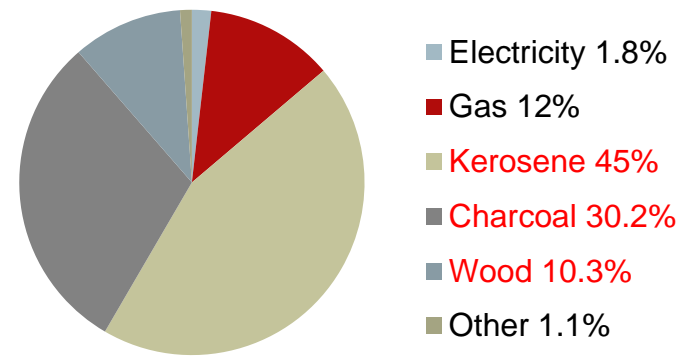
3. Biomass
 - sustainable supply is about **30** million m³
 - **current deficit – 10 million m³**



Kenya – Statistics on Cooking Energy



**Fuels used for Cooking Rural Areas
(UNDP/WHO 2009)**



**Fuels Used for Cooking Urban Areas
(UNDP/WHO 2009)**

Fuel	Purchase Unit	Usage	Cost	Cost per week
Wood (Urban**)	Bundle (20kg)	2 days	210 KES/ \$2.5	\$8.75
Charcoal	1 bag (30kg)	3 weeks	1200 KES/ \$14.3	\$4.8
LPG	13kg	30 days	2500 KES/ \$29.7	\$6.9
Kerosene	1 litre	2 days	100 KES/ \$1.2	\$4.2

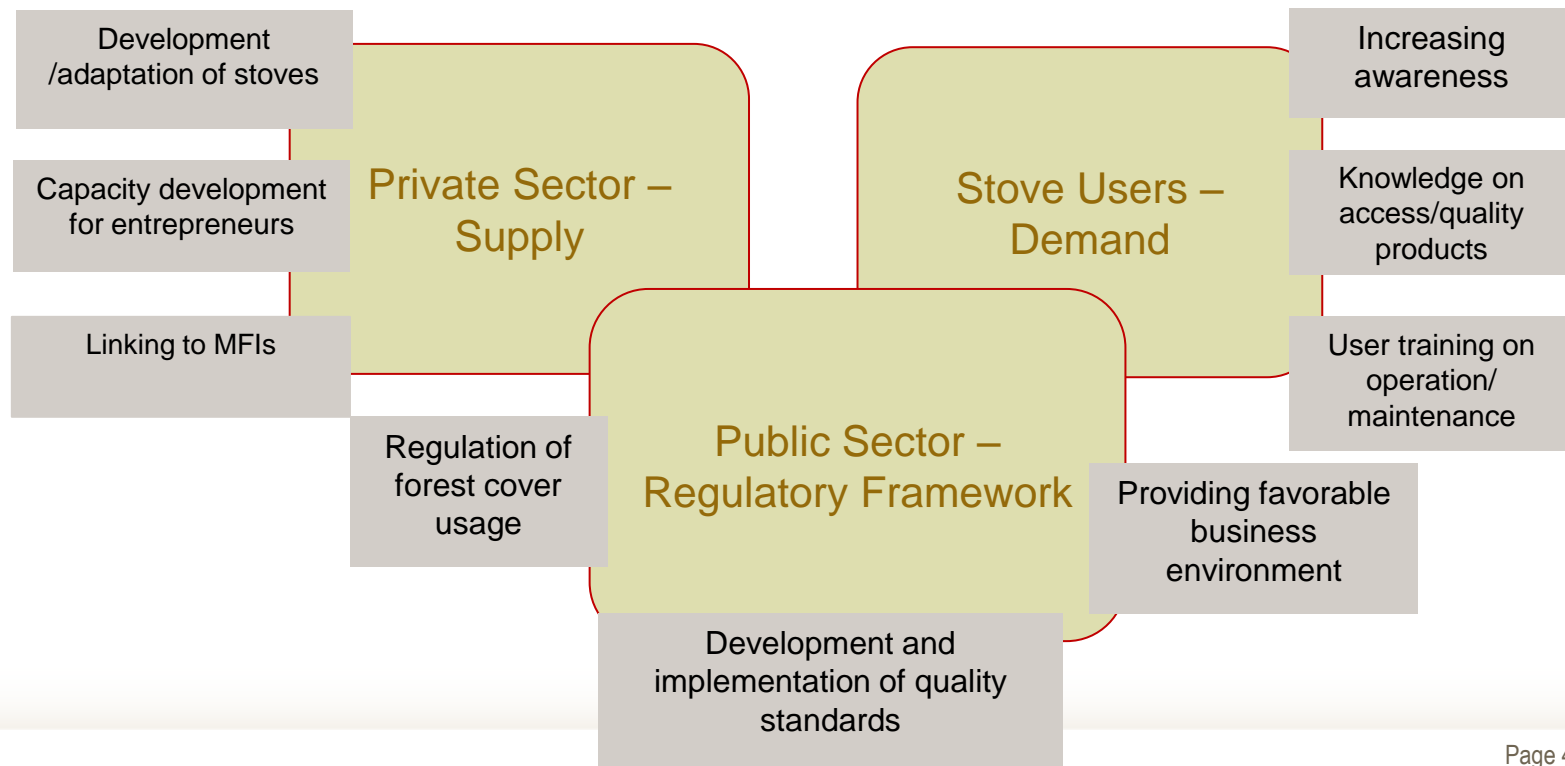
Fuel cost per week (in USD) - using traditional cooking methods*

1 USD =84 KES



EnDev Kenya – Approach for Improved Cookstoves

EnDev supports the **private sector** to undertake commercial activities within the value chain of improved cookstoves, enhances **demand** through raising awareness among the customer base and lobbies the **public sector** to provide favourable framework conditions





Rocket stove – 50% savings



Brick rocket stove

\$ 12 - \$115
size & materials

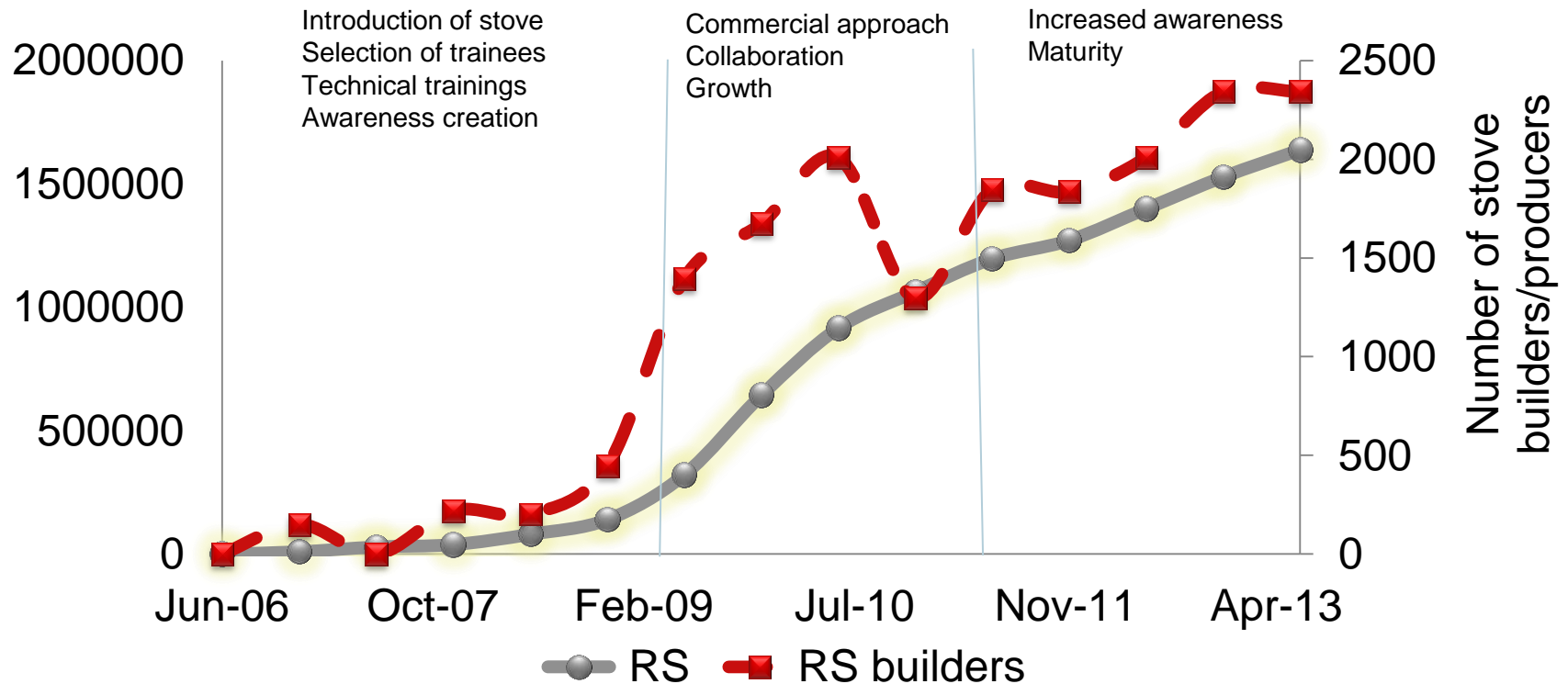


Clay Rocket Stove

\$ 6 – \$19



Rocket Stove Enterprise Growth





Rocket Stove Growth



- Technicians selected & trained at the lowest admin level
- Technicians – very mobile and cover wide territory (stoves built on site)
- As programme move to new areas - new markets - technicians trained- more stoves
- Preferred stove type especially in areas where JK production centers are far



Jiko Kisasa Stove – 40% Savings



\$ 2.5

Jiko kisasa liner



\$ 10

Jiko kisasa portable



\$6

Jiko kisasa one pot

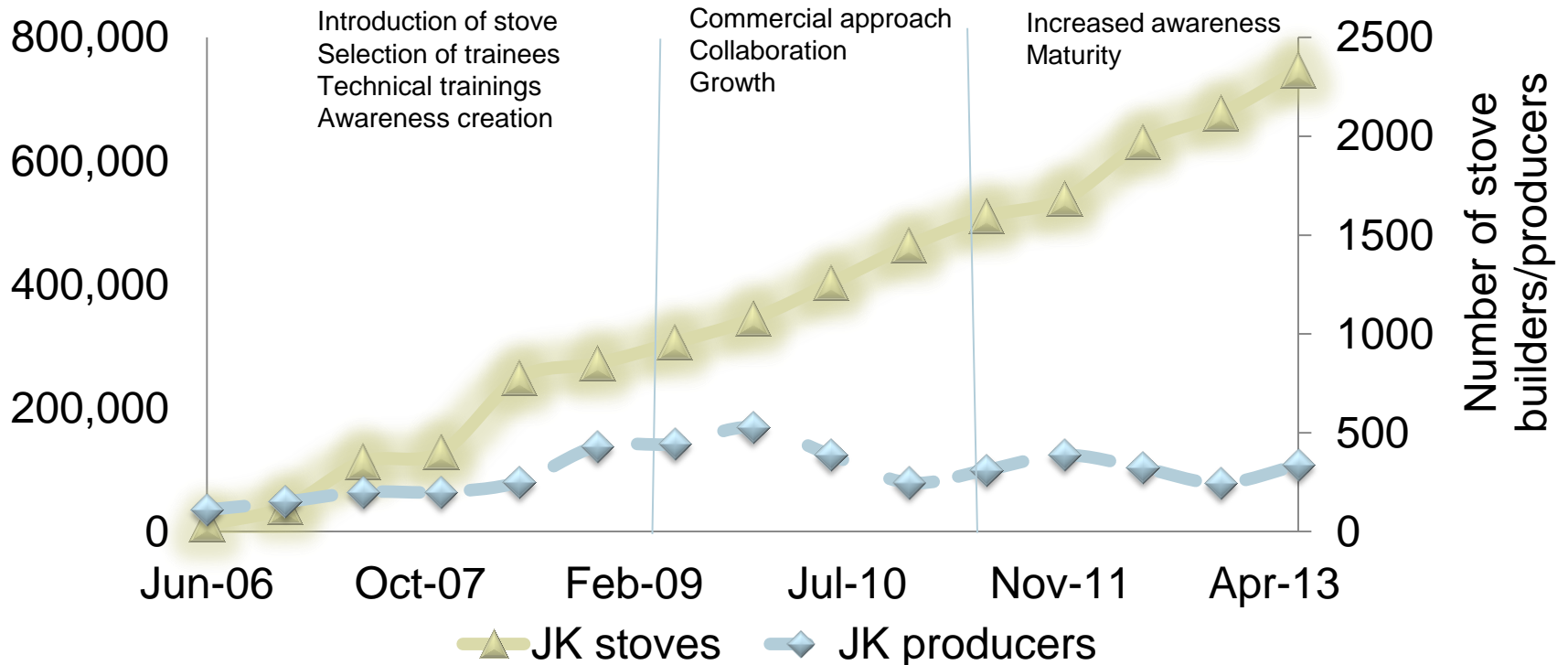


\$12

Jiko kisasa two pots



Jiko Kisasa Enterprise Growth





Jiko Kisasa Growth



- Number of production centers depends on availability of clay on site, limit new centers (avoiding transport cost of raw materials)
- Semi finished product which requires trained technician for installation
- The development of the stoves value chain with **marketing and installation groups /individuals**, working independent of the producers , has created more distribution channels for the liner, without training more producers



Success Factors in Stove Dissemination – lessons -1

1. **Integrated approach** to household energy issues is necessary

- Agriculture – access community through organized farmers groups (Tea industry)
- Forestry conservation & water catchment protection - stoves as conservation measure
- Gender – women empowerment (income and employment opportunity)
- Health - preventive health measure against respiratory infections (mosquito nets)

2. **Public sector** - **relevant in building sustainable markets for improved cookstoves**

- Adoption funds - to support market development for a limited period of time (awareness)
- Agencies - stoves testing, standards development (to inform policy and regulation)
- Supportive policy to creating favorable business environment and enforcing standards to protect consumers
- Building capacities in government institutions (inform policy formulation)



Success Factors in Stove Dissemination – lessons - 2

3. Private sector participation - **supply**

- Private sector - **take lead in service delivery** (employment and income generation) – motivation to engage
- Proven technology to keep enterprises in business and ensure growth
- Availability and accessibility of financial products for business growth is crucial
- Need to be formalized to access form of support from public sector – many smes are informal

4. Stove users – **demand**

- **Public awareness** - prerequisite for successful interventions – need to know what is on offer
- Consumer subsidies are not a good way of helping the poor - built **functioning market system** instead - sustainability
- **Consumer education** – proper use of the stove to gain the benefit
- Durability of improved stoves is important for their successful dissemination
- Availability, accessibility and affordability is important in getting customers interested
- Partnership with other stakeholders to reach more people



Thank you for your
attention



On behalf of
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Jiko Kisasa Stove in Kenya