Market Assessment Context

This Executive Summary is part of the Kenyan Market Assessment conducted by the Global Village Energy Partnership (GVEP) and Accenture Development Partnerships (ADP) on behalf of the Global Alliance for Clean Cookstoves. Four assessments were conducted across East Africa in Kenya, Uganda, Tanzania and Rwanda as part of a broader effort by the Alliance to enhance the sector market intelligence and knowledge. They are intended to provide a high level snapshot of the sector (based on mid 2012). Further detail on these assessments can be found at the end of this document.

The Kenyan Cookstove Market

Since its emergence in the 1980s and the successful introduction of the Kenyan Ceramic Jiko (KCJ), the Kenyan stove market has long been viewed as a pioneer in the East Africa region. In the 25 years since, the broad 'jua kali' artisanal base has endured, with some players such as Musaki Enterprises expanding to producing thousands of stoves each month. Additionally, two categories of organizations have influenced the market; NGOs such as Practical Action have focused on developing the artisanal base and international players funded by carbon finance. Amongst the NGOs, GIZ has been at the forefront in recent times through their EnDev program, successfully disseminating stoves to 2.8M[i] people in mainly rural and poor areas. Of the international players, Envirofit and Paradigm have entered the scene by promoting higher end stoves subsidized by carbon credits.

When looking at the sector from a national perspective, an estimated 9.9M people are exposed to IAP[ii], contributing to 14,300 deaths every year[iii]. Demand for biomass based cooking fuels, namely wood & charcoal, is also contributing to serious ecological issues for the country including deforestation and desertification. The government is attempting to address these but much remains to be done.

The abundance of activity in the marketplace has resulted in an overall penetration rate of approximately 36%[iv]. This doesn't tell the full picture however, as rural adoption is widely recognized to be much lower. These communities are heavily dependent on fuelwood, which is typically collected for free[v], meaning the economic benefit of owning an ICS is much smaller. Only GIZ and CO2Balance have managed to make inroads into these communities (using different approaches).

In urban areas, the rapid increase in fuel prices is influencing consumer cookstove usage. Prices are increasing across the board but kerosene is the most resilient. An increased use of this fuel and the associated stoves amongst these communities is predicted.

The main conclusions of the Market Assessment are shown in the table below:

		Situation	Hypothesis
Foster an Enabling Environment	*Regulation & Testing*	Standards only apply to stoves in supermarkets, a fraction of the market. The diversity of the 'jua kali' artisanal base makes it incredibly difficult to monitor & enforce standards.	Expanding standards & improving producers' access to stove testing can help drive up standards in the industry over the longer term.
	Awareness	Actors from most areas are well aware of ICS but stove performance is often not a top priority. Many consumers do not fully appreciate the potential benefits of quality ICS, with most demand based on price and superficial visual appearance.	Raising awareness and support for the benefits of 'quality' can help channel time & resources into stoves with the greatest benefit for consumers.
	Knowledge Capital & Transfer	The existing research does not fully illustrate the market demand & the intricacies of all the promising segments	A deeper understanding of the market will help programs & stove businesses open up new markets and increase consumer demand for quality stoves.
Cookstoves Value Chain	*Design*	Certain stoves in the market do not offer consumers the full benefit of fuel savings & emission reductions and are not easily distinguished from poorly performing competitors.	Improving the performance of popular stoves and creating a distinct branding can help stimulate consumer demand for quality and drive up overall performance of stoves in the market.
	Materials / Fuel	Demand for LPG is increasing despite the rise in prices, relatively limited access & prohibitively expensive upfront costs.	Improving access & reducing the initial barriers to purchase will drive up adoption rates of LPG.
	Production	Only a handful of producers are manufacturing at scale (1000s/month)[vi], limiting their ability to offer quality products at competitive prices.	Supporting capacity building of high-potential producers will allow them to scale up production, take advantage of economies of scale & enhance the sustainability of their businesses.
	Sales & Distribution	"Marketing" and distribution remains the greatest challenge for many stove businesses[vii]. Rural penetration estimates can be as low as 2%[viii] while many communities remain hard to reach.	Supporting marketing activity across the sector will help stimulate greater consumer demand for quality ICS in urban areas. Carbon finance & alternative approaches, such as GIZ, can help address the low rural uptake.

Summary of Illustrative Priority Intervention Options

The greatest challenges facing the Kenyan cookstove sector appear to be low demand in rural areas, the lack of consumer demand for higher quality products in urban markets, and few businesses supplying quality stoves at scale. Distribution networks to access markets are a challenge for producers of quality stoves. Consumers aspire to cleaner more convenient fuels including LPG but supplies are limited and expensive. If these issues can be addressed, the Kenyan market can build on its reputation as a pioneer in the cookstove field. Based on this, the recommended intervention options can be summarized as:

- Work with the government, the Kenyan Bureau of Standards (KEBS) and industry to develop stove standards that can be enforced gradually and provide an aspirational target for high potential producers.
- Promote the importance of efficiency, durability and emission performance levels across the sector. Undertake further consumer research to fill gaps in market intelligence (such as the kerosene market) and then tailor awareness campaigns based on this data
- Improve producers' access to stove testing then support product and brand development to expand the presence of high performing stoves in the market. This must be closely linked with any marketing interventions to help stimulate consumer demand for 'quality'
- Building on recent innovative initiatives, work closely with the government and industry to improve the access and attractiveness of LPG for certain urban segments.
- Support stove businesses (both producers & distributors) with marketing expertise and access to finance to help expand their distribution networks and tap into new markets. Then, once there is proven demand, support the associated scale up of production.
- Finally, investigate whether carbon finance or the GIZ EnDev model can be replicated to drive up adoption in hard to reach rural communities.

Market Assessment Approach

- This is one of sixteen such assessments completed by the Alliance to:
  - Enhance sector market intelligence and knowledge; and
  - Contribute to a process leading to the Alliance deciding which regions/countries it will prioritize.
- Four assessments were conducted across East Africa in Kenya, Uganda, Tanzania and Rwanda as part of a broader effort by the Alliance to enhance the sector market intelligence and knowledge.
- Each assessment has two parts:
  - Sector Mapping – an objective mapping of the sector; and
  - Intervention Options – suggestions for removing the many barriers that currently prevent the creation of a thriving market for clean cooking solutions.
- In each Alliance study a combination of GVEP, ADP, and local consultants spent 4-6 weeks in country conducting a combination of primary (in-depth interviews) and secondary research. They used the same Market Assessment 'Toolkit' for each country so that comparisons can be made. The Toolkit is available free of charge to all organizations wishing to use it in other countries.

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References

[i] GIZ En-Dev Factsheet, 2011

[ii] Market Assessment Sector Mapping, 2012

[iii] WHO Indoor Air Pollution, National Burden of Disease Estimates, 2007

[iv] Based on market size outlined in Shell Foundation, Breathing Space Research, 2007

[v] Shell Foundation, Breathing Space Research, 2007

[vi] Market Assessment Sector Mapping, 2012

[vii] USAID Market, The Kenyan Household Cookstove Sector Assessment, 2011

[viii] Shell Foundation, Breathing Space Research, 2007