

Introduction and Background

This Executive Summary describes the key points from the East African Regional Intervention Options paper prepared by Accenture Development Partnerships (ADP) on behalf of the Global Alliance for Clean Cookstoves ('the Alliance'). It builds on the Market Assessments conducted by the Global Village Energy Partnership (GVEP) and ADP in four East African countries; Kenya, Uganda, Tanzania and Rwanda. The Market Assessments consist of two parts; an objective mapping of the sector and a series of intervention options that provide suggestions to help with the creation of a thriving market for clean cookstoves and fuels. These assessments are intended to provide a high level snapshot of the sector (based on mid 2012) that can then be used in conjunction with a number of other research papers, consumer surveys and other sources to help the Alliance decide which countries, regions and interventions to prioritize. Further detail on these assessments can be found at the end of this document.

The specific aim of the Regional Intervention Options paper was to identify any themes within the cookstove sectors of the four East African countries mentioned above, and investigate whether there was any justification for regional market interventions. i.e. to act collectively across the four countries on a particular issue by taking advantage of economies of scale and/or efficiency savings rather than on an individual country-by-country basis.

It is important to note that the findings and intervention themes outlined are intended to form a basis for a discussion on potential regional collaboration within the cookstoves sector, not provide a comprehensive answer. This must be done in consultation with stakeholders from across the region.

Background on cookstove sectors within East Africa

Most of the East African cookstove sectors emerged in the 1980s led by the Kenyan development of the Kenyan Ceramic Jiko (KCJ). Since then, countless stakeholders in each country have developed numerous stoves to address both urban and rural communities. However, despite this concerted effort, penetration rates show that there is still much to be done to help reduce the health and environmental impact of cooking. Uganda and Tanzania show particular room for improvement with estimated penetration rates of 8.4% and 5% respectively, compared to 36% for Kenya and 50% for Rwanda¹. Of course, penetration is not the only consideration. The overall quality of stoves; fuels savings, emissions reduction and durability, are equally important. Each country in the region has both good and underperforming stoves, and the aim should be to push up the overall quality.

Many of these countries face similar challenges to scaling up the stove sector and increasing ICS adoption. Affordability of quality stoves, low demand and consumer awareness in certain rural areas, expanding distribution networks, accessing finance for working capital and improving the overall quality of stoves in the market are common challenges present across East Africa. This situation has restricted the growth of both the sector and businesses with it, making it difficult for many producers to commercialize at scale. Despite that, there are many innovative programs looking to address these challenges and that have shown genuine success. There is also a selection of promising stove businesses dispersed across the region that have real potential to commercialize at scale if given the correct financial and business development support.

The creation of an enabling environment is also critical to the success of these businesses. Governments across the region have been active in the stove sector for decades but there is now real momentum due to the pressure on biomass resources, the primary energy source. This situation is a major factor in the European Union Energy Initiative Partnership Dialogue Facility’s (EUEI PDF) decision to fund biomass strategies across the region. With one strategy already in place (Rwanda), two in development (Kenya and Tanzania) and another being discussed (Uganda), the stove sector’s visibility appears to be rising steadily up the political agenda. Of course, the real challenge will be working with the national governments to put these plans into action.

The top insights from each of the Market Assessments were compared to identify any common themes present across the four countries. These themes were assessed for their level of similarity and the feasibility of working collectively, across the region, to address it. Following this comparison, the opportunities were graded as favorable, moderately favorable or unfavorable as shown below. The favorable and moderately favorable were then analyzed in more detail.

- *Favorable:* Materials/Fuels
- *Moderately Favorable:* Regulation & Testing, Awareness, Knowledge Capital & Transfer, Design and Production
- *Unfavorable:* Support / Funding, Repair and replacement, Monitoring & Evaluation and Sales & Distribution

The main opportunities identified at a regional level are illustrated below:

		Situation	Hypothesis
Foster an Enabling Environment	<i>Regulation & Testing</i>	All countries are either developing standards or have them in place – in varying degrees of maturity. Testing facilities exist in all countries but appear to lack the ability to test emissions & are uniformly costly.	Collaborating to create common regional standards will position the sector well when these are agreed at a global level. It will also signal a strong message of intent for the development of the sector.
	<i>Awareness</i>	Government awareness is reasonably high even although ICS is not always priority due to other pressing demands. However, not everyone is aware of the health implications of stoves.	Forming a collective body of stakeholder from across the region, will help represent the sector and increase the voice needed to raise cookstoves & fuels further up the political agenda. Raising the sector’s awareness of the health impact of ICS will promote the concept of ‘do no harm’ in regard to stove emissions.
	<i>Knowledge Capital & Transfer</i>	Precise adoption statistics are difficult to find in each country, although Uganda and Rwanda do collect formal data through their household surveys every four years.	Formalizing ICS adoption research across the region would provide a clear baseline of the sector. Lessons could be learned across the region rather than within individual countries and data could provide a foundation for regional interventions.

	<i>Design</i>	There is a broad range of stoves in each country that appears to address many relevant consumer groups. Various high quality stoves exist in different countries across the region but only one model is available in several countries (Envirofit).	Providing import relief & distribution support for high quality stoves could lead to the growth of these across the region, providing that costs could be minimized. Design innovations could be shared from one country to the next to accelerate product development across the region.
Cookstoves Value Chain	<i>Materials / Fuel</i>	The price of charcoal is increasing across the region, especially in urban areas. Access to LPG is unreliable and initial costs prohibitively high. The production and use of briquettes appears to be increasing.	Sharing innovative fuel solutions across the region, such as the 1kg Pima Gas LPG canister and Inyenyeri's rurally sourced briquette business, could help to increase the adoption of alternative, cleaner fuels.
	<i>Production</i>	Some of the fundamental cookstove production processes, such as liner production, show similarities across the region. The quality of products varies considerably. Inappropriate manufacturing methods are often undermining the overall stove quality.	Connecting the most promising businesses from each country may help build the aspirations of business owners whilst sharing knowledge about scale up, sales and distribution.

Summary of Illustrative Regional Intervention Options

The number of shared issues and the similarity of the consumer base imply that there is great opportunity to share knowledge and experience across the region. In some cases, certain models could be transferred from one country to the next if pilots show promising impact and the conditions are correct. However, the unique environment in each country suggests that this should be done on a case by case basis. Approaching the East Africa region with broad brush interventions appear to be an overly simplistic solution that is fraught with potential risk. Nonetheless, there are clear opportunities to work together that must be assessed further. These can be described as:

- Partner standard agencies, statistics bureaus and industry representatives across the region to speed up and improve the development of common stove standards (for both efficiency & emissions) and baseline data
- Work with the East Africa Community (EAC) Renewable Energy Group to deliver on their ambitious ICS targets for the region. The EAC Secretariat may be able to provide specialist support around awareness raising, raising finance and program management
- Encourage greater sharing of knowledge across shared challenges such as production techniques and innovative models for fuel delivery
- Work collectively to raise the cookstoves and cleaner fuel issue further up the political agenda, potentially through the EAC platform

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 ADP, GVEP, 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.

Acknowledgements

The Alliance wishes to acknowledge the generous support of the following donors for the market assessments: Barr Foundation, Dow Corning Corporation, Shell Corporation, Shell Foundation, and the governments of Canada, Finland, and Spain.

References

ⁱ Based on Shell Foundation, Breathing Space Research, 2007