

Market Assessment Context

This document summarizes the Vietnamese Cookstove and Fuels Market Assessment conducted by Accenture Development Partnerships (ADP) on behalf of the Global Alliance for Clean Cookstoves. Sixteen assessments were conducted across the world as part of a broader effort by the Alliance to enhance 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 Vietnamese Cookstove Market

Vietnam is well on its march to becoming a middle-income country by 2020, having made incredible economic strides across the board in the past decades. GDP increases of 18%ⁱ per year have sustained until recently due to progressive economic opening and modernization, and Vietnam is expected to meet most of the Millennium Development Goals prior to 2015, including those around relative gender equality. Despite these significant gains, 46.4%ⁱⁱ of people still rely on solid fuel for cooking, causing 10,600ⁱⁱⁱ deaths per year.

Despite the continued issue, there hasn't been a large appetite for the funding of end-to-end, full-scale ICS programs by either the Government or NGOs. Most programs are small (under 1000 stoves, sometimes as low as 40) and focus on demonstrations and design. Two examples of large scale do exist, with the influential rural distribution organization, Vietnam Women's Union, having distributed 29,300 stoves in the North, and SNV's Biogas program having the goal of installing 140,000 biogas digesters from 2003-2012.^{iv}

Smaller cookstove components have been integrated into the broader renewable energy, deforestation, food security/cropland salinization programs. This has led to many cookstove researchers being involved in biomass energy production, Biochar production, or sustainable forest initiatives. With a relatively immature private sector, this locally-relevant innovation finds it difficult to make the leap to market-based solutions in the consumer market.

In general, the consumer is highly demanding, with strong aspirations of leapfrogging past solid fuel entirely. Consumers tend to purchase their first LPG stove once they hit the threshold of \$50/month^v, but many still prefer to purchase better status symbols, such as satellite TV, over a new cookstove.

In general, the challenge in creating a self-sustaining market in Vietnam lies around effectively managing a highly fragmented and immature industry sector. It is a struggle to find improved cookstove manufacturers, marketers, and service providers to produce, sell, and service the stoves. That being said, there is little issue other than cost to distributing to the last mile in Vietnam, with the Women's Union having reach just about everywhere. The government, local NGOs, and international NGOs continue to express support.

The main conclusions of the Market Assessment are illustrated in the table below.

		Situation	Hypothesis
Fostering an enabling environment	<i>Regulation & Testing</i>	There aren't standards for cookstoves, and even standards for motorbike helmets and medical degrees were only instituted in the past decade. Knock-off stoves are common. Some research institutions are capable of testing but don't have active facilities.	Quality of products could be proven and improved. Knock-off producer quality can be increased by integrating them into the ICS market. Best-practice can be borrowed from Geres in Cambodia.
	<i>Knowledge Capital & Transfer</i>	There is a lack of knowledge about user needs and preferences, especially in the South. The existing data from the North cannot be extrapolated, as cultures differ regionally. Supporting research on health and gender is hard to locate.	Consumer preference data is needed to more accurately target program beneficiaries with the most suitable stove, marketed in the best way. Health & gender implications create impetus for government to provide funding.
	<i>Monitoring & Evaluation</i>	Most programs do not yet track longevity of impacts past the funding period or based on specific metrics. There is no long-term usage monitoring, or continued research and development based on customer feedback.	Best practice program design that includes long-term monitoring can be transferred to Vietnamese programs. Potentially, this can be implemented through local women, providing longer term quality and more insight into evolution of consumer needs.
Cookstoves Value Chain	<i>Materials & Fuel</i>	The rising cost of LPG is causing many households to turn back to traditional fuels because cleaner biomass fuels are also too expensive. Agricultural waste is not used; it is often just open-burned	An industrialized supply chain system for agricultural waste could create an affordable way to produce pellets. The toxic beehive coal problem could be improved through cleaner briquettes.
	<i>Production</i>	Manufacturing is highly fragmented across small scale producers, with little ability to scale up. Commercial funding is relatively difficult to receive. Human capacity to run large-scale production is also limited. Social Enterprises are not yet recognized by the government.	Better access to capital can help SMEs scale up, particularly programs or companies that have a proven successful model or pilot program. Training can be conducted to build production capability among SMEs.
	<i>Sales & Distribution</i>	A strong distribution network exists with the Women's Union among other NGOs and social enterprises, but the regions most in need, and the best way to market and distribute to them is not yet determined.	The best target regions and the most optimal distribution partner should be determined. Women villager promoters should be used for best results. A marketing campaign will help create desire to purchase and drive awareness
	<i>Repair & Replacement</i>	Many programs gave away stoves, leaving no market for repair or replacement after the program ended.	Market-based programs will provide greater longevity of repair and replacement opportunities, or a market for this should be integrated into program designs.

Summary of Illustrative Priority Intervention Options

A generally supportive enabling environment requires additional information and funding to improve long-term program success. Significant effort is required to develop capabilities of producers and marketers and to create products that demonstrate a multi-faceted value proposition for the consumer.

- Work with a capable research institution to develop and enforce cookstove standards and set up or repair an existing testing center in order to infuse branding and quality markers into the sector. ‘Knock-off’ producers can be discovered and then trained to make higher quality stoves.
- Improve knowledge capital by conducting research in gap areas according to geography (south of Vietnam) and subject matter (health impacts, gender). Support ongoing research, such as IAP research by NIOEH
- Institute a working group and hold an online seminar in order to transfer best practice in monitoring & evaluation components of program design, specifically related to discovering the baseline, developing program guidelines and metrics, and integration of longitudinal tracking.
- Industrialize and lower the cost of alternative, cleaner fuels such as pellets and clean briquettes, making sure that these fuels retain their efficiency over traditional biomass fuels.
- Scale up projects that have demonstrated success in their pilot phase, but are struggling because they have no funding or visibility to expand.
- Expand micro financing offerings beyond the consumer to fund relevant social enterprises.
- Develop capability training for businesses and entrepreneurs, particularly female, to encourage more effective production.
- Determine target regions for market-based stove programs and identify optimal implementers for the chosen target region(s).
- Incorporate after-sales service into cookstove implementation programs and into the business model for stove producers.

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.
- Full slate of market assessments include studies in: Bangladesh, Brazil, Colombia, East Timor, Ethiopia, Ghana, Indonesia, Kenya, Mexico, Nigeria, Peru, Rwanda, South Africa, Tanzania, Uganda and Vietnam.
- 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 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

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- ⁱ Vietnam GSO, GSO Living Standards Survey
 - ⁱⁱ GSO Multiple Indicator Cluster Survey 2011
 - ⁱⁱⁱ WHO IAP: National Burden of Disease Estimates 2007
 - ^{iv} SNV Interviews
 - ^v Vietnam Sector Mapping 2012, ADP Calculation