

Stanford SOCIAL INNOVATION Review

Informing and inspiring leaders of social change

ENVIRONMENT

Innovations That Address the Last-Mile Distribution Challenge

Social enterprises have taken up the challenge of developing markets for newly designed cook stoves in India.

By [Diana Jue](#) | May. 2, 2011

As I mentioned in my last post, **technologies designed for the poor are numerous**, but their dissemination and adoption are limited. One popular technology is the clean-burning, fuel-efficient, biomass cook stove. An estimated 826 million Indians still depend on traditional biomass-burning cook stoves, which emit vast quantities of polluting smoke.

Between 1983 and 2002, the national government embarked on the National Programme on Improved Chulhas (cook stoves). The scheme was unsuccessful for many reasons: The custom-built stoves were not appropriate for customers' energy needs or cooking habits dissemination was limited because stoves were made on-site by local artisans and entrepreneurs, quality control and user education were nonexistent, program administration was cumbersome, monitoring was nil, government subsidies for the stove decreased use and maintenance, and there was no accountability for poor program performance. The government's introduction of inferior goods at subsidized prices tended to skew customers' perception away from a long-term, market-based solution.

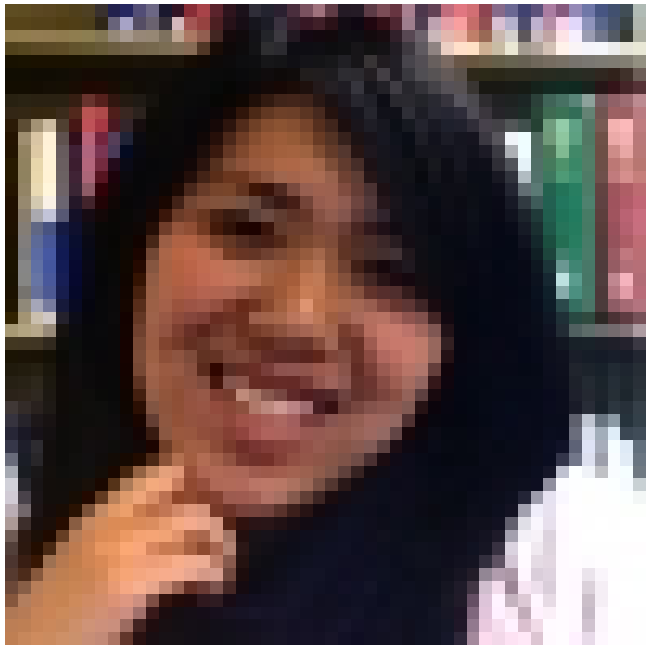
Despite this, social enterprises have taken up the challenge of developing markets for newly designed cook stoves in India. Here are some of the components of their last-mile distribution efforts.

1. Teaming up with a nongovernmental organization (NGO) or a microfinance institution

(MFI) to take advantage of their pre-existing network of beneficiaries and clients. The company First Energy Oorja partners with small, local NGOs to distribute its stoves. First Energy Oorja trains local NGO workers, who bring the product to the rural end user. The company **Envirofit** is pushing its stoves through the MFI channel. By bundling the stove with other financial products, the MFI can subsidize the cost of the stove.

2. Working with a rural dealer network that markets, sells, and distributes products into the hinterland. In addition to using NGOs to sell its products, First Energy Oorja utilizes two rural dealer networks. The first dealer network is Adharam Energy, a spin-off company of the Covenant Centre for Development, an NGO. Adharam Energy identifies jyothis, female village-level entrepreneurs who are usually members of self-help groups. Jyothis give live demonstrations of new stoves to other females in their communities and sell stoves by collecting monthly intents of purchase from customers. Another rural dealer network is **Villgro Stores**, the retail arm of Villgro, an NGO that incubates new social enterprises. Villgro Stores operates a hub-and-spoke model of brick-and-mortar stores and village-level entrepreneurs, who purchase products from stores and extend products into their villages. Both First Energy Oorja and Villgro Stores face the problem of finding and investing in village-level entrepreneurs, who are not in infinite supply and require expensive training and handholding.
3. Piggybacking on existing rural networks created to distribute other products. For example, **Prakti Designs** promotes its stoves through **SELCO**, a company that installs customizable home electricity systems in rural areas. However, SELCO workers have discovered that selling electricity systems greatly differs from selling cook stoves, so more investment in sales training may be required.
4. Leveraging mass marketing resources and traditional rural trade networks. Envirofit primarily sells its stoves through traditional rural trade networks, distributors, and retailers. Its cook stoves are situated by durable items like televisions in township stores, which are up to 30 kilometers away from rural customers' residences. To generate demand at these stores, Envirofit has invested in a mass-media advertising newspaper and television campaigns. Although Envirofit's advertising can reach more customers than other enterprises', its efforts are expensive and will only be able to reach the top of the bottom of the pyramid. To reach lower income households, Envirofit is relying on old-fashioned word of mouth and time.

Two reading recommendations: "**The Base of the Pyramid Distribution Challenge**" by the Institute for Financial Management and Research's Centre for Development Finance and "**Lessons from the Last Mile**," from Beyond Profit e-magazine. Both focus on the challenges and solutions to last-mile distribution in rural India.



Diana Jue is working toward her Master of City Planning at MIT's Department of Urban Studies and Planning as a member of the International Development Group. Her interests include international economic development and social entrepreneurship. For her thesis, she researches appropriate technology dissemination through social enterprises to rural India.

Tags

Partnerships, Poverty, Social Enterprise

Copyright © 2014

If you like this article enough to print it, be sure to subscribe to SSIR!

Cancel

Close